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ABSTRACT

This competency-based task analysis guide is intended to assist teachers and administrators in developing secondary-level instructional materials that meet the needs of students and industry and comply with the Virginia competency-based education (CBE) standards for vocational and adult education. It is a revision of the Agricultural Business Instructional Resource Guide published in 1983. Section 1 provides a validated task inventory for agricultural business. For each task, information on performance objectives, criterion-referenced measures, and suggested instructional activities and aids is provided. Section 2 provides descriptions of agricultural business courses, followed by suggested task sequence listings and course outlines. The instructional topics within the course outlines are cross-referenced with corresponding task numbers from the task inventory in Section 1. Courses included are Agricultural Business Fundamentals, Agricultural Business Operations, and Agricultural Business Management. Postsecondary programs, courses, and tasks are briefly described. Appendixes contain a list of references, a tools and equipment list, and a list of audiovisual suppliers. (CML)

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AGRICULTURAL BUSINESS TASK ANALYSES

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DEPARTMENT OF EDUCATION
VOCATIONAL AND ADULT EDUCATION
RICHMOND, VIRGINIA 23216

1988

REVISED

COMPETENCY-BASED
CBE
EDUCATION

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GUIDE APPLICATION

This competency-based task analyses guide is based on the following representative Dictionary of Occupational Titles (DOT) job titles contained in the occupational domain of AGRICULTURAL BUSINESS.

DOT Job Title	DOT Code
General farm manager	180.167-018
Sales representative, farm and garden	272.357-014
Salesperson, horticultural and nursery	272.357-022
Salesperson, parts	279.357-062
Sales clerk	290.447-014
Hand sprayer	408.684-014
Feed mixer	520.685-098
Fertilizer mixer	550.665-018
Insecticide mixer	550.685-070

Therefore, the guide is useful in developing instructional material and implementing competency-based education for the following program and courses:

Program	Courses
Agricultural Business (01.0101)	Agricultural Business Fundamentals (III) 8022 Agricultural Business Operations (IV) 8024 Agricultural Business Management (V) 8026

Virginia Community College System (VCCS) courses that are related to the occupational domain and job titles contained in this guide are listed in Section 2.

Additional information concerning the application and use of this guide in program planning and development should be addressed to:

Agricultural Education Service
Department of Education
P.O. Box 6Q
Richmond, Virginia 23216-2060

AGRICULTURAL BUSINESS
TASK ANALYSES

Prepared by

Virginia Vocational Curriculum and Resource Center

in cooperation with

Agricultural Education Service
Virginia Department of Education
Vocational and Adult Education
Richmond, Virginia 23216

Revised
1988

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FOREWORD

In the next decade, businesses and industries in Virginia will require large numbers of skilled workers. Therefore, vocational education at the secondary and postsecondary levels will have the responsibility of preparing individuals for a variety of occupations.

Competency-based education (CBE) provides the preparation students need for entry into the Virginia work force. The CBE practice of recording competencies developed by students helps them to make a smooth transition between secondary and postsecondary programs when both levels of education are required for career training. In addition, CBE is effective in retraining workers who have been displaced because of changing technology.

This guide will assist teachers and administrators in developing instructional materials that meet the needs of students and industry and comply with the Virginia CBE standards for vocational and adult education.

S. John Davis
Superintendent of Public Instruction

Jerry M. Hicks
Administrative Director
Vocational and Adult Education

Johnas F. Hockaday
Chancellor
Virginia Community College System

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Derek Campbell, Old Dominion Fertilizer
Rick Hubbard, Herod Seeds
Jim Mohler, farm owner
Russell Neblitt, T & A Repairs.

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INTRODUCTION

This task analyses guide is designed to be used in combination with the Agricultural Education Service Area Resource in order to implement competency-based education in the Agricultural Business program. The service area resource contains information that pertains to all programs within the Agricultural Education area; the sections of that publication are entitled Occupational Information, Student Organization (Future Farmers of America), Classroom Management Systems, and Recording Systems. This task analyses guide contains the task inventory, suggested task sequence lists, and content outlines for the specific courses in Agricultural Business. Detailed instructions for combined use of these publications are contained within the service area resource.

Using the Task Analyses

Section 1 contains a validated task inventory for Agricultural Business. For each task, applicable information pertaining to performance objectives, criterion-referenced measures, and suggested instructional activities and aids is provided. Tasks are arranged by worker duty area only, and the suggested task sequence lists from Section 2 (as adapted by the local system) should be used to establish teaching order of the tasks.

Section 2 of the task analyses guide provides descriptions of the Agricultural Business courses, followed by suggested task sequence listings and course outlines. The instructional topics within the course outlines have been cross-referenced with corresponding task numbers from the task inventory in Section 1.

It is suggested that the Section 2 task sequence lists and course content outlines be reviewed initially in order that any desired changes in sequencing of instruction be made. Once the sequencing is confirmed, instructional planning and implementation may proceed by referring to the Section 1 task number noted beside each instructional topic within the outline.

SECTION 1

TASK INVENTORY

One of the major characteristics of competency-based education (CBE) is that the course content is based upon actual jobs or tasks performed by the worker. In Virginia, the Department of Education has established standards for competency-based education. According to these standards, competencies must be role-relevant and based upon appropriate research. This standard states:

> Role-relevant competencies are identified and stated.
>
> The competencies, with standards, will be identified through V-TECS, IDECC, and other appropriate research. Advisory committees should be used to review competencies and standards. Competencies in the affective domain will be included. Role-relevant competencies for occupational preparation programs are those that specifically relate to the occupation for which the student is being prepared, as well as to the personal needs of the student. Role-relevant competencies are related also to orientation, exploration, and/or industrial arts experiences that have been identified for students.

Therefore, role-relevant jobs or tasks, called competencies in CBE, must be identified and validated before instructional materials are developed and subsequent instruction takes place. The task list in this task analyses guide is based on the following:

1. Job titles and descriptions found in the Occupational Outlook Handbook and the Dictionary of Occupational Titles
2. V-TECS catalogs
3. Input from agricultural education supervisors and experienced agricultural business teachers.

Information collected and reviewed from these sources was used to develop an initial task list. The next step involved in preparing the final task inventory was validation of the task list. Validation is essential if the information collected is to be useful in operating CBE courses and programs. The validation process included the review of all tasks by an agricultural business technical committee.

The task analyses sheets are arranged by duty areas for the specific domain covered by the guide. Information contained on each sheet includes:

1. The task/competency for a given duty area that is performed by incumbent workers
2. Course application information
3. Performance objective for the specific task
4. Criterion-referenced measure for instructional planning
5. Enabling objectives and instructional activities helpful in teaching the task/competency.

A resource section follows each duty area. This section contains information on equipment and material needed to teach each task, suggested references for each task, and available audiovisual aids and software that the teacher may find helpful.

In many instances, learning activities leading to mastery of tasks/competencies outlined in this section may take place in a cooperative work setting or in actual school- or community-related opportunities for agricultural business. However, all performance objectives are presented for classroom or laboratory instruction so they may be used in localities where these opportunities do not exist; they may be easily adapted to actual work situations.

TASK INVENTORY FOR

AGRICULTURAL BUSINESS

DUTY/CONCEPT AREAS

1. ORIENTING THE STUDENT TO AGRICULTURAL BUSINESS
2. CHOOSING A CAREER IN AGRICULTURAL BUSINESS
3. DEVELOPING HUMAN RELATIONS SKILLS
4. UNDERSTANDING AGRICULTURAL BUSINESS PROCEDURES
5. SELLING AGRICULTURAL PRODUCTS AND SERVICES
6. USING BUSINESS LAWS IN AGRICULTURAL BUSINESS
7. IDENTIFYING MARKETING TECHNIQUES FOR AGRICULTURAL PRODUCTS AND SERVICES
8. USING AGRICULTURAL MECHANICS IN AGRICULTURAL BUSINESS
9. USING PLANT SCIENCE IN AGRICULTURAL BUSINESS
10. RELATING ANIMAL CARE, NUTRITION, AND DISEASE CONTROL TO AGRICULTURAL BUSINESS
11. SELLING AND APPLYING AGRICULTURAL CHEMICALS
12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

DUTY AREA

1. ORIENTING THE STUDENT TO AGRICULTURAL BUSINESS

TASKS/COMPETENCIES

1.1 Follow departmental polices

1.2 Perform safety procedures

1.3 Maintain a clean and orderly work area

1.4 Identify benefits and responsibilities of FFA membership

CONCEPT/DUTY AREA:

1. ORIENTING THE STUDENT TO AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022
AGRICULTURAL BUSINESS OPERATIONS (IV) 8024
AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

1.1 Follow departmental policies

PERFORMANCE OBJECTIVE

P1.1 Given a copy of departmental policies concerning student responsibilities and procedures for daily operation; copies of school, class, and laboratory rules; and information on course objectives and evaluation procedures, follow departmental policies in classroom and laboratory work. All items on an instructor-prepared checklist must be rated acceptable.

CRITERION-REFERENCED MEASURE

C1.1 Instructor-prepared checklist; all items rated acceptable

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Identify student responsibilities in the classroom, laboratory, and on field trips.
2. Outline content and objectives of the course.
3. Explain procedures for the daily operation of the department.
4. Review policies and procedures with second- and third-year students.

CONCEPT/DUTY AREA:

1. ORIENTING THE STUDENT TO AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022
AGRICULTURAL BUSINESS OPERATIONS (IV) 8024
AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

1.2 Perform safety procedures

PERFORMANCE OBJECTIVE

P1.2 Given personal protective equipment, classroom and laboratory safety rules, and instructor's demonstration, perform safety procedures. Performance must be made in accordance with instructor's demonstration.

CRITERION-REFERENCED MEASURE

C1.2 Demonstration of safety procedures in accordance with instructor's demonstration

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Identify each item of personal safety equipment, and explain the use of each.
2. Outline all power tool safety rules for specific pieces of equipment.
3. Invite a representative of the fire department to discuss classes of fires and the type of fire extinguisher to use for each.
4. Demonstrate the operation of each type of fire extinguisher.
5. Interpret safety signs, symbols, and color codes.
6. Locate cleaning, maintenance, and safety procedures in a specific equipment manual.

CONCEPT/DUTY AREA:

1. ORIENTING THE STUDENT TO AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022
AGRICULTURAL BUSINESS OPERATIONS (IV) 8024
AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

1.3 Maintain a clean and orderly work area

PERFORMANCE OBJECTIVE

P1.3 Given instructor's guidelines, cleaning tools and supplies, cleaning schedules, and designated storage areas, maintain a clean and orderly work area. All items must be stored properly, and work area must be clean and organized in accordance with instructor's guidelines.

CRITERION-REFERENCED MEASURE

C1.3 Maintenance of work area; instructor's guidelines

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Identify areas to be cleaned.
2. Explain cleaning schedule, and identify personnel responsible for specific cleaning duties.
3. Demonstrate cleaning procedures.
4. List items to be stored, and explain storage procedures.
5. Differentiate among types of cleaning products, and relate appropriate and inappropriate uses of each.
6. Discuss all safety precautions.

CONCEPT/DUTY AREA:

1. ORIENTING THE STUDENT TO AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022
AGRICULTURAL BUSINESS OPERATIONS (IV) 8024
AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

1.4 Identify benefits and responsibilities of FFA membership

PERFORMANCE OBJECTIVE

P1.4 Given copies of FFA materials, classroom discussion, and instructor-prepared worksheet, identify benefits and responsibilities of FFA membership by completing the worksheet as indicated by the instructor.

CRITERION-REFERENCED MEASURE

C1.4 Instructor-prepared worksheet; all items completed

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Explain the purpose and goals of the FFA.
2. State the structure and organization of the club.
3. Describe activities of various committees.
4. Show a videotape or slides of special FFA functions.
5. Identify FFA contests and awards, and relate possible benefits.
6. Invite former FFA members to discuss ways membership in the organization benefited them.

RESOURCES

TASK 1.1

Equipment and Material: Instructor-provided handouts (classroom/laboratory rules, course objectives, and checklist)

TASK 1.2

Equipment and Material:
Equipment manuals
Fire extinguishers
Personal safety equipment
Instructor-prepared handout of safety rules

Audiovisuals: Developing Shop Safety Skills (slides/cassettes). AAVIM.

References:
Developing Shop Safety Skills. AAVIM.
Modern Agricultural Mechanics. Wakeman.
Power Tool Safety and Operation. Hoerner.

TASK 1.3

Equipment and Material:
Cleaning supplies, tools, and equipment
Instructor-provided cleaning schedule and guidelines

References: Developing Shop Safety Skills. AAVIM.

TASK 1.4

Equipment and Material:
FFA material
Instructor-prepared worksheet

Audiovisuals: Agricultural Proficiency Awards (film). National FFA Supply Service.

References:
FFA Activity Handbook. Future Farmers of America.
Official FFA Manual. Future Farmers of America.

DUTY AREA

2. CHOOSING A CAREER IN AGRICULTURAL BUSINESS

TASKS/COMPETENCIES

2.1 Identify occupations applicable to the agricultural business industry

2.2 Select a tentative occupation

2.3 Write a letter of application

2.4 Complete a job application form

2.5 Develop a resume or personal data sheet

2.6 Exhibit job interviewing skills

2.7 Write a follow-up letter of appreciation

2.8 Identify responsibilities and benefits of cooperative education

CONCEPT/DUTY AREA:

2. CHOOSING A CAREER IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

2.1 Identify occupations applicable to the agricultural business industry

PERFORMANCE OBJECTIVE

P2.1 Given information from the Dictionary of Occupational Titles, identify occupations applicable to the agricultural business industry. Identification should be made with 100% accuracy on the checklist provided.

CRITERION-REFERENCED MEASURE

C2.1 "Identifying Job Titles" checklist; 100% accuracy

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Define occupational title.
2. Describe the agricultural business industry.
3. Locate agricultural business occupational titles in the Dictionary of Occupational Titles.
4. Identify agricultural businesses in the community.
5. Write job descriptions for agricultural business occupations.
6. Classify agricultural business job titles into the following categories: a) unskilled; b) skilled/technical; and c) managerial/supervisory.
7. Identify educational and experiential requirements for agricultural business occupations.

Task 2.1

IDENTIFYING JOB TITLES

Checklist

Name _____ Course_____

Place a check in the blank before each job title that is found within the agricultural business industry.

___1. Sales representative, farm and garden

___2. Air conditioning mechanic

___3. Farm machinery set-up mechanic

___4. General farm manager

___5. Machine assembler

___6. Salesperson, horticultural and nursery products

___7. Feed mixer

___8. Newscaster

___9. Soap inspector

__10. Sales clerk

___11. Salesperson, parts

___12. Machine trimmer

___13. Insecticide mixer

___14. Clay mixer

___15. Advertising clerk

___16. Fertilizer mixer

___17. Hoist operator

___18. Aircraft-engine assembler

___19. Dyer

___20. Hand sprayer

CONCEPT/DUTY AREA:

2. CHOOSING A CAREER IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

2.2 Select a tentative occupation

PERFORMANCE OBJECTIVE

P2.2 Given information on the decision-making process and on various agricultural business occupations, select a tentative occupation in agricultural business. All items on the worksheet provided must be completed.

CRITERION-REFERENCED MEASURE

C2.2 "Selecting a Tentative Occupation" worksheet; all items completed

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Discuss the steps in the decision-making process.
2. Define terms associated with employment.
3. Evaluate personal career goals, interests, abilities, and motivation.
4. List characteristics of a selected occupation.
5. Relate working conditions of a chosen occupation to individual interests and preferences.
6. Interview an employer.

Task 2.2

SELECTING A TENTATIVE OCCUPATION

Worksheet

Name _____ Course_____

Job selected_____

Obtain the following information from a prospective employer, a person working in the same career, or from references.

1. Job title--

2. What does the worker do?

3. What tools or equipment are used?

4. Does job require high school education? Technical education?

5. What qualifications, other than education, are necessary?
   Physical

   Mental

   Aptitude or personality

6. What are the working conditions and hours?

7. In what kind of business is this job found?

8. What are the opportunities for advancement?

SELECTING A TENTATIVE OCCUPATION

Worksheet (continued)

9. What are several related jobs?

10. What interests would this job satisfy?

11. To what abilities is this job related?

12. Will this job require more or fewer employees in the future?

13. Upon what bases are employees evaluated for promotion?

14. What are the most common mistakes made by employees in performing this job?

15. What are the expected earnings and benefits from this job?

CONCEPT/DUTY AREA:

2. CHOOSING A CAREER IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

2.3 Write a letter of application

PERFORMANCE OBJECTIVE

P2.3 Given information on business letter formats and the necessary supplies and equipment, write a letter of application. Letter must be in correct business letter format, neatly written or typed, and grammatically correct.

CRITERION-REFERENCED MEASURE

C2.3 Letter of application; correct business letter format, neatly written or typed, and grammatically correct

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Distribute handout "Information Included in a Letter of Application", and discuss.
2. Prepare and distribute a sample letter of application; discuss each component.
3. List reasons why an employer might request a letter of application.
4. Discuss procedures associated with listing references.
5. State the impression given by a letter containing mistakes.

INFORMATION INCLUDED IN A LETTER OF APPLICATION

HEADING

- street address
- city, state, & zip code
- date

INSIDE ADDRESS

- employer's name
- company's name
- company's street address
- city, state, & zip code

SALUTATION

- employer's name & colon

FIRST PARAGRAPH

- name of job
- where applicant heard about the job
- interest in being considered as an applicant

SECOND PARAGRAPH

- why applicant interested in the job
- related qualifications and experience
- personal references

THIRD PARAGRAPH

- request for an interview
- how applicant can be reached
- when applicant can be reached

CLOSING & SIGNATURE

- phrase & comma
- applicant's full signature
- applicant's full name typed

CONCEPT/DUTY AREA:

2. CHOOSING A CAREER IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

2.4 Complete a job application form

PERFORMANCE OBJECTIVE

P2.4 Given information and resources, complete a job application form. The completed application must be neat, accurate, and grammatically correct.

CRITERION-REFERENCED MEASURE

C2.4 "Job Application Form" or instructor-provided form from a local agricultural business; neat, accurate, and grammatically correct.

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Define employment record, termination date, immediate supervisor, N/A, and other terms often found on application forms.
2. Invite a personnel director from a local agricultural business to discuss job application forms.
3. Devise transparencies of sections of an application form; discuss each component of the form.
4. Describe how an employer may use applications as a "first step" in the interviewing process.

SAMPLE JOB APPLICATION FORM

Personal

NAME | SOCIAL SECURITY NUMBER

ADDRESS (Street) (City) (State) (Zip Code) | PHONE (Area Code and Number)

DO YOU HAVE A VALID DRIVER'S LICENSE ___ Yes ___ No | DATE OF BIRTH

ARE YOU AVAILABLE FOR TEMPORARY EMPLOYMENT LASTING:

A. Less than 1 month? ___ Yes ___ No
B. 1 to 4 months? ___ Yes ___ No
C. 5 to 12 months? ___ Yes ___ No

ARE YOU AVAILABLE FOR PART-TIME POSITIONS OFFERING:

A. 20 or fewer hours per week ___Yes ___ No
B. 20 to 31 hours per week ___Yes ___ No
C. 32 to 39 hours per week ___Yes ___ No

Education

	Name of School	Year Graduated	Course Taken or Degree	Scholastic Average
HIGH SCHOOL				
TRADE OR BUSINESS SCHOOL				
COLLEGE				
EXTRACURRICULAR ACTIVITIES				

LIST DATES, BRANCH, AND SERIAL NUMBER OF ALL ACTIVE U.S. MILITARY SERVICE (enter N/A if not applicable)

From	To	Branch of Service	Service or Serial No.

EXPERIENCE (GIVE PRESENT OR MOST RECENT POSITION FIRST. IF ADDITIONAL SPACE IS NEEDED, ATTACH SEPARATE SHEET)

I. COMPANY | ADDRESS

TYPE OF BUSINESS/INDUSTRY | EMPLOYED (Month & Year) From To

POSITION(S) HELD | SUPERVISOR'S NAME

DESCRIBE YOUR DUTIES

WHY DID YOU LEAVE?

DAYS LOST FROM WORK DUE TO ILLNESS _____ INJURY _____ OTHER _____

II. COMPANY ADDRESS

TYPE OF BUSINESS/INDUSTRY EMPLOYED (Month & Year) From To

POSITION(S) HELD SUPERVISOR'S NAME

DESCRIBE YOUR DUTIES

WHY DID YOU LEAVE?

DAYS LOST FROM WORK DUE TO ILLNESS _____ INJURY _____ OTHER _____

Personal References (NAME THREE PERSONS WHO HAVE KNOWN YOU AT LEAST TWO YEARS NOT FORMER EMPLOYERS OR RELATIVES.)

Name	Address	Phone

CONCEPT/DUTY AREA:

2. CHOOSING A CAREER IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

2.5 Develop a resume or personal data sheet

PERFORMANCE OBJECTIVE

P2.5 Given information and resources, develop a resume or personal data sheet. To be acceptable, the finished document must be neatly written or typed, must contain no grammatical errors, and must be complete and accurate.

CRITERION-REFERENCED MEASURE

C2.5 Resume or personal data sheet; neatly written or typed, grammatically correct, and completed fully and accurately

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Identify the purposes of a resume or personal data sheet.
2. Determine information to be included in a resume.
3. Identify jobs that relate to competencies mastered.
4. Distribute handout, and discuss each component of a resume or personal data sheet.
5. Distribute copies of exemplary resumes; have students discuss.

THE PERSONAL DATA SHEET

HEADING

Full name
Street address
City, state, and zip code
Telephone number

PERSONAL INFORMATION

Birthdate
Birthplace
Height
Weight
Health status

EDUCATION

Schools attended
Dates of attendance
Grades completed
Subjects studies

SKILLS

Work-related skills learned from past training or experience

ACTIVITIES AND INTERESTS

Club memberships
Offices held
Awards received
Hobbies and spare time interests

WORK EXPERIENCE

Formal and informal jobs held
(start with most recent and go back)

REFERENCES

Names
Addresses
Telephone numbers
(NO RELATIVES, PLEASE)

CONCEPT/DUTY AREA:

2. CHOOSING A CAREER IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

2.6 Exhibit job interviewing skills

PERFORMANCE OBJECTIVE

P2.6 Given information on the purposes of an interview and on the appropriate behavior for job interviews, exhibit job interviewing skills in a role-play situation. All items on the instructor's checklist must be rated as acceptable.

CRITERION-REFERENCED MEASURE

C2.6 Instructor's Checklist 2.6; all items rated acceptable

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. State the purposes of a job interview.
2. Explain ways to prepare for an interview.
3. Describe appropriate dress for an interview.
4. List materials to take to an interview.
5. Identify and interpret questions the interviewer might ask the applicant.
6. Identify questions the applicant might ask the interviewer.
7. Videotape mock interviews; have students discuss.

INSTRUCTOR'S CHECKLIST 2.6

ITEM	RATING*	
	Acceptable	Unacceptable
The student: 1. Arrived on time.		
2. Was dressed and groomed appropriately.		
3. Introduced self by full given name.		
4. Called interviewer by title and last name.		
5. Shook hands firmly, if interviewer offered.		
6. Sat down only after being invited.		
7. Let the interviewer set the tone and procedure for the interview.		
8. Maintained good standing and sitting posture.		
9. Maintained facial expressions and body language indicating alertness, enthusiasm, and attentiveness.		
10. Spoke clearly, with appropriate grammar, volume, and rate of speech.		
11. Initiated some of the discussion without interrupting the interviewer.		
12. Answered questions honestly, providing information to support claims.		

* All items must receive acceptable rating.

INSTRUCTOR'S CHECKLIST 2.6 (continued)

ITEM	RATING*	
	Acceptable	Unacceptable
13. Listened to interviewer and made appropriate responses to statements.		
14. Stressed job-related qualifications, strengths, and skills.		
15. Asked questions about job and firm to indicate interest.		
16. Prepared to leave when interviewer signalled the end of the interview.		
17. Confirmed information related to next step.		
18. Thanked the interviewer for his or her time and effort.		

* All items must receive acceptable rating.

CONCEPT/DUTY AREA:

2. CHOOSING A CAREER IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

2.7 Write a follow-up letter of appreciation

PERFORMANCE OBJECTIVE

P2.7 Given information on the types and purposes of follow-up letters, write a follow-up letter of appreciation. Letter must be in proper business letter format, neatly written or typed, and grammatically correct.

CRITERION-REFERENCED MEASURE

C2.7 Follow-up letter of appreciation; correct business letter format, neatly written or typed, and grammatically correct

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Explain reasons for writing a follow-up letter.
2. Discuss information included in a follow-up letter, such as thanking the employer for his or her time; expressing an interest in the job; mentioning any information that might have been overlooked in the interview; and restating personal qualifications.
3. Review business letter formats.
4. Prepare a sample follow-up letter; distribute and discuss.

CONCEPT/DUTY AREA:

2. CHOOSING A CAREER IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

2.8 Complete a cooperative education application form

PERFORMANCE OBJECTIVE

P2.8 Given information on the cooperative education work program, complete a cooperative education application form. Form must be completed in accordance with instructor's guidelines.

CRITERION-REFERENCED MEASURE

C2.8 "Sample Application for Cooperation Education in Agriculture" or instructor-provided application form; instructor's guidelines

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Explain the purposes of cooperative education.
2. Determine course credits needed and time available for work.
3. Determine competencies to be developed during the cooperative work experience.
4. Invite employers to visit the classroom and laboratory.

SAMPLE APPLICATION FOR COOPERATIVE EDUCATION IN AGRICULTURE

Name _____ Phone Number _____

Address _____ Soc. Sec. No. _____

_____ Zip _____ Birth Date _____
Month Day Year

Parent or Guardian _____

Address if different _____

Your graduation year _____ Are you applying for released school time? ___ Yes ___ No

What courses and credits do you need to graduate?

English _____ Credits Math _____ Credits Social Studies _____ Credits Other _____ Credits

When will you be free to work? 5th period __ 6th period __ 7th period __ After School __

What sports, if any, will you be playing? _____

What other conflicts will you have with placement? _____

_____

What is your occupational goal? _____

First choice of training station _____

Second choice of training station _____

What transportation arrangements do you have? _____

_____

Do you have physical or medical problems that would prevent you from working certain jobs?
Yes ____ No ____ If yes, what? _____

Are you employed now? Yes ____ No ____ If yes, give name of employer _____

Are the duties agricultural? Yes ____ No ____

List other personal circumstances that would prevent you from working all year.

_____

_____

_____

Parental Approval

_____ has my permission to participate in cooperative education. I
Student Name

do ____ do not ____ agree to allow released school time for placement.

_____
Parent

_____
Date

RESOURCES

TASK 2.1

Equipment and Material:
Newspapers
Telephone directory
"Identifying Job Titles" checklist

Audiovisuals:
Careers in Agricultural Business and Service (slides/cassettes). Ohio Agricultural Education Curriculum Materials Service.

References:
Agribusiness Procedures and Records. Lee and Lee.
Careers in Agribusiness and Industry. Stone.
Dictionary of Occupational Titles. U.S. Department of Labor.
Occupational Outlook Handbook. U.S. Department of Labor.
Opportunities in Agricultural Occupations. Ohio Agricultural Education Curriculum Materials Service.
Working in Agricultural Industry. Lee.

TASK 2.2

Equipment and Material:
"Selecting a Tentative Occupation" worksheet

References:
Agricultural Education Service Area Resource. Virginia Department of Education.
Agricultural Science and Mechanics I and II Task Analyses. Virginia Department of Education.
Human Relations in Agribusiness. Hillison and Crunkilton.
Leadership for Agricultural Industry. Stewart.

TASK 2.3

Equipment and Material:
"Information Included in a Letter of Application" handout

References:
Human Relations in Agribusiness. Hillison and Crunkilton.
Opportunities in Agricultural Occupations. Ohio Agricultural Education Curriculum Materials Service.
Pre-Employment: Education for Employment Work Experience Cooperative Education Program, p. 387. Virginia Department of Education.

TASK 2.4

Equipment and Material:
"Job Application Form" handout

References:
Applying for a Job. Vocational Agriculture Services.
Human Relations in Agribusiness. Hillison and Crunkilton.
Opportunities in Agricultural Occupations. Ohio Agricultural Education Curriculum Materials Service.

TASK 2.5

Equipment and Material: "The Personal Data Sheet" handout

References: Human Relations in Agribusiness. Hillison and Crunkilton.
Pre-Employment: Education for Employment Work Experience Cooperative Education Program. Virginia Department of Education.

TASK 2.6

Equipment and Material: Instructor's Checklist 2.6

References: Gearing Up For Success. Virginia Department of Education.
Getting Hired for Your First Job. Ohio Agricultural Education Curriculum Materials Service.
Human Relations in Agribusiness. Hillison and Crunkilton.

TASK 2.7

References: Human Relations in Agribusiness. Hillison and Crunkilton.
Pre-Employment: Education for Employment Work Experience Cooperative Education Program. Virginia Department of Education.

TASK 2.8

Equipment and Material: "Sample Application for Cooperative Education in Agriculture" worksheet

References: Cooperative Education in Agriculture in Virginia. Virginia Department of Education.

DUTY AREA

3. DEVELOPING HUMAN RELATIONS SKILLS

TASKS/COMPETENCIES

3.1 Use effective speaking and listening techniques

3.2 Explain the importance of etiquette

3.3 Explain ways to promote effective human relations

CONCEPT/DUTY AREA:

3. DEVELOPING HUMAN RELATIONS SKILLS

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

3.1 Use effective speaking and listening techniques

PERFORMANCE OBJECTIVE

P3.1 Given descriptions of job situations in agricultural business, use effective speaking and listening techniques to respond appropriately to each situation. All items on the checklist provided must be rated as acceptable.

CRITERION-REFERENCED MEASURE

C3.1 Instructor's Checklist 3.1; all items rated acceptable

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Define communication.
2. Demonstrate effective speaking techniques.
3. Present a formal speech.
4. Describe effective listening techniques.
5. State the causes for communication breakdown.

INSTRUCTOR'S CHECKLIST 3.1

DUTY: Developing Human Relations Skills

TASK: Use effective speaking and listening skills

ITEM	RATING*	
	Acceptable	Unacceptable
The student		
1. Maintained proper distance from the other person (or people).		
2. Maintained eye contact.		
3. Used body language and facial expression consistent with message being sent or received.		
4. Maintained control over emotions.		
5. Was polite and courteous.		
As a speaker		
6. Spoke distinctly.		
7. Used appropriate volume.		
8. Spoke at appropriate speed.		
9. Used Standard English grammar and phrasing.		

* All items must receive acceptable rating.

Instructor's Checklist 3.1 (continued)

ITEM	RATING*	
	Acceptable	Unacceptable
As a listener		
10. Responded to the speaker through questions, expression of interest, or rephrasing.		
11. Took notes, if appropriate.		
On the telephone		
12. Answered phone as directed.		
13. Gave information or referred caller to proper person.		
14. Took message as requested.		
15. Initiated calls by identifying company and self.		
16. Stated message clearly and concisely.		
17. Spoke distinctly, at appropriate speed and volume.		
18. Thanked the other person.		

* All items must receive acceptable rating.

CONCEPT/DUTY AREA:

3. DEVELOPING HUMAN RELATIONS SKILLS

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

3.2 Explain the importance of etiquette

PERFORMANCE OBJECTIVE

P3.2 Given classroom instruction and resources, explain the importance of etiquette. At least 8 of the 10 items on the quiz provided must be answered correctly.

CRITERION-REFERENCED MEASURE

C3.2 "Testing Your Etiquette" quiz; 8 of 10 items answered correctly

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Define etiquette.
2. Role play the proper way to make introductions.
3. Discuss the importance of etiquette.

Task 3.2

TESTING YOUR ETIQUETTE

Quiz

Name _____ Course _____

Circle the letter T if the statement is true or the letter F if the statement is false.

T F 1. Forks are placed to the left of the dinner plate.

T F 2. Men should remove their hats when entering a home.

T F 3. Napkins should be tucked under the belt of the diner.

T F 4. You should introduce a young person to an older person.

T F 5. Responding to an RSVP is considered optional.

T F 6. Writing thank-you letters and congratulatory messages is no longer expected of people.

T F 7. "Please," "thank you," and "you're welcome" are terms that are always proper to use.

T F 8. Handkerchiefs should be used when sneezing or coughing.

T F 9. Recording the number to call back is enough information for most telephone messages.

T F 10. Pre-school children should answer the home telephone.

TESTING YOUR ETIQUETTE

Answer key

1. T
2. T
3. F
4. T
5. F
6. F
7. T
8. T
9. F
10. F

CONCEPT/DUTY AREA:

3. DEVELOPING HUMAN RELATIONS SKILLS

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

3.3 Explain ways to promote effective human relations

PERFORMANCE OBJECTIVE

P3.3 Given case studies in which a variety of work, school, and family situations are presented, explain ways to promote effective human relations. Explanations should be made in accordance with instructor-provided guidelines.

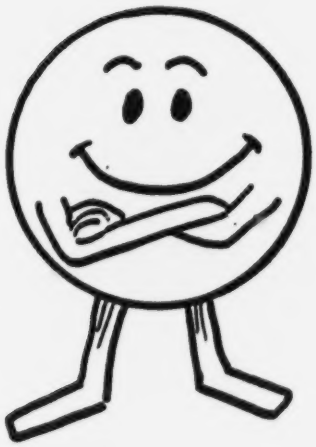
CRITERION-REFERENCED MEASURE

C3.3 Case studies; instructor-provided guidelines

ENABLING OBJECTIVES/LEARNING ACTIVITIES

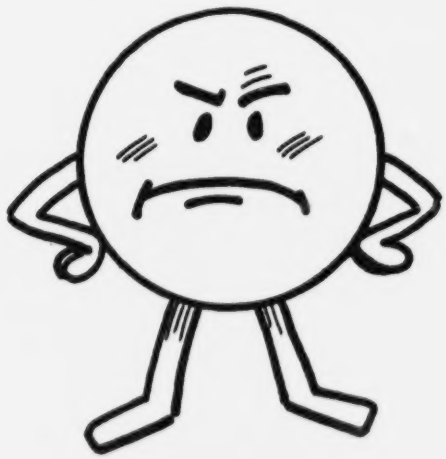
1. Define attitude, tolerance, consideration, cooperation, seniority, and flexibility.
2. Distribute "Attitude" handout, and discuss.
3. List examples of written and unwritten rules often found in the workplace.
4. List examples of human relations skills used in working with customers.
5. Describe human relations from the employer's perspective.

ATTITUDE



POSITIVE

- ✔ THINKS ABOUT WHAT IS GOOD FOR OTHERS
- ✔ RESPECTS OTHER'S OPINIONS
- ✔ NEVER MAKES EXCUSES
- ✔ HAS MANY INTERESTS
- ✔ SMILES
- ✔ NEVER COMPLAINS
- ✔ ADMITS MISTAKES
- ✔ IS WILLING TO CHANGE



NEGATIVE

- ✔ DOES NOT SMILE
- ✔ COMPLAINS ABOUT EVERYTHING
- ✔ HAS FEW INTERESTS, IS OFTEN BORED
- ✔ IS NOT WILLING TO CHANGE
- ✔ BLAMES OTHERS FOR MISTAKES
- ✔ THINKS ONLY ABOUT WHAT IS 'GOOD FOR ME'
- ✔ FORCES OWN OPINION ON OTHERS
- ✔ OFTEN MAKES EXCUSES

RESOURCES

TASK 3.1

Equipment and Material: Instructor's Checklist 3.1

References:
Agribusiness Procedures and Records. Lee and Lee.
Gearing Up for Success. Virginia Department of Education.
Human Relations in Agribusiness. Hillison and Crunkilton.
Leadership for Agricultural Industry. Stewart.
Principles of Management in Agribusiness. Duft.

TASK 3.2

Equipment and Material: "Testing Your Etiquette " quiz

References: Leadership for Agricultural Industry. Stewart.

TASK 3.3

Equipment and Material:
Instructor-prepared case studies
"Attitude" handout

Audiovisuals:
Expectations on the Job (software). Career Aids, Inc.
First Day on the Job (software). Career Aids, Inc.
Human Relations in Agricultural Business (slidefilm). Vocational Agriculture Service.

References:
Getting Along with Other Workers. Ohio Agricultural Education Curriculum Materials Service.
Human Relations at Work. Eggland and Williams.
Human Relations in Agribusiness. Hillison and Crunkilton.
Leadership for Agricultural Industry. Stewart.

DUTY AREA

4. UNDERSTANDING AGRICULTURAL BUSINESS PROCEDURES

TASKS/COMPETENCIES

4.1 Develop an organizational chart

4.2 Identify the traits of a successful businessperson

4.3 Describe employer obligations to employees

4.4 Identify employee incentives and fringe benefits

4.5 Identify methods of extending credit

4.6 Maintain a filing system

4.7 Maintain an inventory

4.8 Prepare a budget

4.9 Schedule activities

4.10 Identify concepts associated with advertising and promotion

4.11 Maintain a business checking account

4.12 Prepare customer account statements

4.13 Write letters to customers

4.14 Compile business tax information

CONCEPT/DUTY AREA:

4. UNDERSTANDING AGRICULTURAL BUSINESS PROCEDURES

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

4.1 Develop an organizational chart

PERFORMANCE OBJECTIVE

P4.1 Given information on the methods of organizing a business, develop an organizational chart for a specific type of agricultural business. Chart must be completed in accordance with guidelines provided by the instructor.

CRITERION-REFERENCED MEASURE

C4.1 Organizational chart; instructor-provided guidelines

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Describe the following types of business ownership: individual proprietorships; partnerships; cooperatives; and corporations.
2. List the positions found in each type of business ownership.
3. State the responsibilities of each position.
4. Explain the reasons for proper business organization.

CONCEPT/DUTY AREA:

4. UNDERSTANDING AGRICULTURAL BUSINESS PROCEDURES

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

4.2 Identify the traits of a successful businessperson

PERFORMANCE OBJECTIVE

P4.2 Given information on personality traits, identify the traits of a successful businessperson. Identification should be made with 80% accuracy on an instructor-prepared worksheet.

CRITERION-REFERENCED MEASURE

C4.2 Instructor-prepared worksheet; 80% accuracy

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Review the study of human relations.
2. Discuss the definition of success.
3. Interview business leaders in the community to determine the traits they think are important.

CONCEPT/DUTY AREA:

4. UNDERSTANDING AGRICULTURAL BUSINESS PROCEDURES

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

4.3 Describe employer obligations to employees

PERFORMANCE OBJECTIVE

P4.3 Given a list of topics and a selection of resources, describe employer obligations to employees. Description should be made in the form of an oral or written report on a topic selected from the list. Report must be presented in accordance with instructor-provided guidelines.

CRITERION-REFERENCED MEASURE

C4.3 Oral or written report; instructor-provided guidelines

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Identify payroll deductions.
2. Describe legal insurance requirements.
3. Describe federal wage and hour requirements.
4. Explain overtime regulations.
5. Explain the concept of worker's compensation.
6. Distribute copies of W-2 and other federal income tax forms.
7. Identify the responsibilities of OSHA.
8. Invite a representative of the Virginia Employment Commission to discuss employer tax liabilities and other state regulations.

CONCEPT/DUTY AREA:

4. UNDERSTANDING AGRICULTURAL BUSINESS PROCEDURES

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

4.4 Identify employee incentives and fringe benefits

PERFORMANCE OBJECTIVE

P4.4 Given information on health insurance, pension plans, and other types of fringe benefits, identify employee incentives and fringe benefits. Identification should be made with 80% accuracy on an instructor-prepared test.

CRITERION-REFERENCED MEASURE

C4.4 Instructor-prepared test; 80% accuracy

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Compare individual health care costs to group health care costs.
2. List and describe various types of life insurance.
3. Discuss profit-sharing plans.
4. Describe such benefits as employee discounts, bonuses, company cars, and employee-sponsored recreational activities.
5. Discuss the relationship between fringe benefits and salary as compensation for doing a job.

CONCEPT/DUTY AREA:

4. UNDERSTANDING AGRICULTURAL BUSINESS PROCEDURES

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

4.5 Identify methods of extending credit

PERFORMANCE OBJECTIVE

P4.5 Given information on the credit policies of different agricultural businesses, identify methods of extending credit. Identification should be made with 80% accuracy on an instructor-prepared test.

CRITERION-REFERENCED MEASURE

C4.5 Instructor-prepared test; 80% accuracy

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Define retail credit, trade credit, open account, installment credit, and Uniform Commercial Credit Code.
2. List the reasons why customers might patronize a business where they can obtain credit.
3. Explain how the credit policies of a company affect the company's cash flow.
4. Identify regulations pertaining to credit terms, installment sales contracts, and negotiable instruments.

CONCEPT/DUTY AREA:

4. UNDERSTANDING AGRICULTURAL BUSINESS PROCEDURES

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

4.6 Maintain a filing system

PERFORMANCE OBJECTIVE

P4.6 Given information on a specific filing system, an organized file, and unsorted records to be filed, maintain the filing system by filing at least 8 of 10 records correctly.

CRITERION-REFERENCED MEASURE

C4.6 Eight of ten records filed correctly

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Describe ways in which files are used.
2. Define sort, index, cross reference, purge, and code.
3. List and explain types of filing systems.
4. Organize FFA resource materials in a filing system such as AGDEX.

CONCEPT/DUTY AREA:

4. UNDERSTANDING AGRICULTURAL BUSINESS PROCEDURES

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

4.7 Maintain an inventory

PERFORMANCE OBJECTIVE

P4.7 Given an up-to-date inventory of equipment or supplies and an established system of purchasing and supply checkout, maintain an inventory for a period of one month. Student inventory totals must be within 10% of the official school inventory totals at the end of the one-month period.

CRITERION-REFERENCED MEASURE

C4.7 Maintenance of inventory for one month; totals within 10% of official school inventory totals

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Discuss the importance of inventory control.
2. Develop a material or equipment identification system.
3. Construct an inventory form.
4. Establish a procedure for conducting an inventory.
5. Investigate commercial inventory software.
6. Use a computer to maintain an inventory.

CONCEPT/DUTY AREA:

4. UNDERSTANDING AGRICULTURAL BUSINESS PROCEDURES

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

4.8 Prepare a budget

PERFORMANCE OBJECTIVE

P4.8 Given the necessary forms, a revenue sheet, and a financial statement, prepare a budget. The budget must be completed in accordance with instructor-provided guidelines.

CRITERION-REFERENCED MEASURE

C4.8 Completion of budget; instructor-provided guidelines

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Describe the various types of budgets.
2. Distribute budgeting forms, and discuss each component.
3. Explain the importance of a budget.
4. Discuss cost-effective enterprise budgeting.
5. Interpret a revenue sheet.
6. Use a computer to complete a budget.

CONCEPT/DUTY AREA:

4. UNDERSTANDING AGRICULTURAL BUSINESS PROCEDURES

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

4.9 Schedule activities

PERFORMANCE OBJECTIVE

P4.9 Given a situation in which a specific occupation, its job description, and the goals for a business are identified, schedule activities for a period of one week. All items on an instructor-prepared checklist must be rated acceptable.

CRITERION-REFERENCED MEASURE

C4.9 Instructor-prepared checklist; all items rated acceptable

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Break down a job into its component parts or tasks.
2. Organize the tasks into a logical sequence.
3. Estimate the amount of time required for each task.
4. Indicate time for lunch and breaks.
5. Arrange for students to observe employees in supervisory positions in an agricultural business.
6. Use a computer to develop schedules.

CONCEPT/DUTY AREA:

4. UNDERSTANDING AGRICULTURAL BUSINESS PROCEDURES

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

4.10 Identify concepts associated with advertising and business promotion

PERFORMANCE OBJECTIVE

P4.10 Given information, resources, and demonstrations, identify concepts associated with advertising and promoting an agricultural business. Identification should be made with 80% accuracy on an instructor-prepared test.

CRITERION-REFERENCED MEASURE

C4.10 Instructor-prepared test; 80% accuracy

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Describe types of publicity, such as news releases and press conferences.
2. Explain the use of window displays, interior displays, and point-of-sale displays.
3. Describe the function of an advertising agency.
4. Identify types of promotional programs (wholesaler, manufacturer).
5. Cite examples of local agricultural business advertising in newspaper, through direct mail, or on radio and television.
6. Compare costs of types of advertising (billboard, magazine, radio).

CONCEPT/DUTY AREA:

4. UNDERSTANDING AGRICULTURAL BUSINESS PROCEDURES

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

4.11 Maintain a business checking account

PERFORMANCE OBJECTIVE

P4.11 Given a simulated agricultural business, maintain a business checking account that is accurate, neat, and complete. All items on an instructor-prepared checklist must be rated as acceptable.

CRITERION-REFERENCED MEASURE

C4.11 Instructor-prepared checklist; all items rated acceptable

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Demonstrate how to write a check.
2. Maintain checkbook register.
3. Demonstrate operation of calculators, adding machines, and computer software.
4. Write legibly.

CONCEPT/DUTY AREA:

4. UNDERSTANDING AGRICULTURAL BUSINESS PROCEDURES

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

4.12 Prepare customer account statements

PERFORMANCE OBJECTIVE

P4.12 Given a customer's account record and the necessary forms, prepare a monthly account statement to be mailed to the customer. The statement must be completed fully and accurately, and all specified components must be included.

CRITERION-REFERENCED MEASURE

C4.12 Completion of account statement as follows:

a) no errors in recording customer's name, address, and account number
b) all charges recorded accurately
c) all payments posted accurately
d) new balance due calculated correctly

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Determine balance on last date of billing.
2. Post charges made against account.
3. Post payments made to account.
4. Determine new balance due.
5. Investigate computerized accounting systems.
6. Compare statement forms used by various businesses, and discuss the advantages and disadvantages of each.

CONCEPT/DUTY AREA:

4. UNDERSTANDING AGRICULTURAL BUSINESS PROCEDURES

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

4.13 Write letters to customers

PERFORMANCE OBJECTIVE

P4.13 Given a situation requiring correspondence, write a letter to a customer. All items on the "Business Letter Checklist" must be rated as acceptable.

CRITERION-REFERENCED MEASURE

C4.13 "Business Letter Checklist"; all items rated acceptable

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Review the components of a business letter.
2. Provide samples of various business letter styles and forms.
3. Outline contents of letter.
4. Proofread letters, and correct all errors.
5. Prepare letter on typewriter, word processor, or personal computer.
6. Demonstrate how to make copies of business letters.
7. Maintain filing system.

BUSINESS LETTER CHECKLIST

DUTY: Using Business Procedures in Agricultural Business

TASK: Write letters to customers

ITEM	RATING*	
	Acceptable	Unacceptable
The student		
1. Used the correct style and form.		
2. Organized the letter.		
3. Used tactful and courteous expressions.		
4. Included accurate information.		
5. Spelled all words correctly.		
6. Used correct grammar.		
7. Produced a neat, final copy of letter.		
8. Signed the letter properly.		

* All items must receive acceptable rating.

CONCEPT/DUTY AREA:

4. UNDERSTANDING AGRICULTURAL BUSINESS PROCEDURES

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

4.14 Compile business tax information

PERFORMANCE OBJECTIVE

P4.14 Given data from a simulated agricultural business and instruction on business taxes, compile the information necessary to file business tax forms. All items on an instructor-prepared checklist must be rated acceptable.

CRITERION-REFERENCED MEASURE

C4.14 Instructor-prepared checklist; all items rated acceptable

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Maintain an accurate filing system.
2. List the information needed for business taxes.
3. Keep accurate records.
4. Use an electronic calculator.
5. Total columns of data, and compute necessary information.
6. Complete business tax form.

RESOURCES

TASK 4.1

Equipment and Material: Instructor-provided guidelines

Audiovisuals: Managing for Profit--Organizing the Business (slidefilm). Vocational Agriculture Service.

References: Common Ways of Organizing a Business. Vocational Agriculture Service.
Principles of Management in Agribusiness. Duft.
Working in Agricultural Industry. Lee.

TASK 4.2

None identified

TASK 4.3

Equipment and Material: Instructor-prepared list of report topics and report guidelines
U.S. Government publications on withholding, minimum wages, etc.

References: Opportunities in Agricultural Occupations. Ohio Agricultural Education Curriculum Materials Service.

TASK 4.4

Equipment and Material: Instructor-prepared test

References: Working in Agricultural Industry. Lee.

TASK 4.5

Equipment and Material: Instructor-prepared test

References: Agribusiness Procedures and Records. Lee and Lee.
Customer Credit Management in Agricultural Business. Vocational Agriculture Service.

TASK 4.6

Equipment and Material: Filing cabinet
Filing materials
Unsorted records to be filed

TASK 4.6 (continued)

References: Agribusiness Procedures and Records. Lee and Lee.
Keeping Your Records Straight. Ohio Agricultural Education Curriculum Materials Service.

TASK 4.7

Equipment and Material: Equipment/supply inventory

References: Agribusiness Procedures and Records. Lee and Lee.
Agricultural Equipment Parts Salesperson. V-TECS.
Inventory Management and Control. Vocational Agriculture Service.
Nursery Production. V-TECS.
Office Procedures Used in the Agricultural Services. Ohio Agricultural Education Curriculum Materials Service.

TASK 4.8

Equipment and Material:
Budget forms
Revenue sheets
Financial statements
Instructor-provided guidelines

References: Modern Agricultural Management. Schneeberger and Osburn.

TASK 4.9

Equipment and Material: Instructor-provided case study and checklist

TASK 4.10

Equipment and Material: Instructor-prepared test

References: Advertising and Promotion of Agricultural Products. Ohio Agricultural Education Curriculum Materials Service.

TASK 4.11

Equipment and Material:
Checking supplies
Calculator
Instructor-prepared checklist

Audiovisuals: Introduction to Computers in Agribusiness (software). AAVIM.
Personal Accounting (software). AAVIM.

TASK 4.11 (continued)

References: Office Procedures Used in the Agricultural Services. Ohio Agricultural Education Curriculum Materials Service.
Understanding Microcomputers. AAVIM.
Using Savings and Checking Accounts. Ohio Agricultural Education Curriculum Materials Service.

TASK 4.12

Equipment and Material:
Calculator
Account statement forms

References: Agricultural Business Procedures. Vocational Agriculture Service.
Office Procedures Used in the Agricultural Services. Ohio Agricultural Education Curriculum Materials Service.

TASK 4.13

Equipment and Material: "Business Letter Checklist"

TASK 4.14

Equipment and Material:
Sample business tax forms
Calculator
Instructor-prepared checklist

References: Modern Agriculture Management. Schneeberger and Osburn.
Office Procedures Used in the Agricultural Services. Ohio Agricultural Education Curriculum Materials Service.

DUTY AREA

5. SELLING AGRICULTURAL PRODUCTS AND SERVICES

TASKS/COMPETENCIES

5.1 Identify personality traits that are beneficial to a salesperson

5.2 Identify types of customer service

5.3 Analyze the ways of locating customers

5.4 Demonstrate methods of obtaining and maintaining a customer's attention

5.5 Assess the methods of closing a sale

5.6 Make a sales presentation

5.7 Classify customers

5.8 Make a follow-up call or visit

CONCEPT/DUTY AREA:

5. SELLING AGRICULTURAL PRODUCTS AND SERVICES

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

5.1 Identify personality traits that are beneficial to a salesperson

PERFORMANCE OBJECTIVE

P5.1 Given an opportunity to observe successful salespersons in local agribusinesses, identify personality traits that are beneficial to a salesperson. A minimum of four traits must be identified and an explanation of how each trait is beneficial must be provided in accordance with instructor's guidelines.

CRITERION-REFERENCED MEASURE

C5.1 Identification of at least four traits with explanation of how each trait is beneficial; instructor's guidelines

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Review study of human relations.
2. Identify successful salespeople.
3. Observe successful salespeople at work.
4. Discuss how customers react to various salespeople.

CONCEPT/DUTY AREA:

5. SELLING AGRICULTURAL PRODUCTS AND SERVICES

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

5.2 Identify types of customer service

PERFORMANCE OBJECTIVE

P5.2 Given instruction on services provided to customers of agricultural businesses, identify types of customer service with 100% accuracy on instructor-prepared written test.

CRITERION-REFERENCED MEASURE

C5.2 Instructor-prepared written test; 100% accuracy

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Identify the specific needs of consumers.
2. Match customer services provided to the specific needs of consumers.
3. Analyze the effect of customer services on sales.
4. Conduct a telephone survey to identify the types of customer services provided in the community.
5. Explain disadvantages of customer services.

CONCEPT/DUTY AREA:

5. SELLING AGRICULTURAL PRODUCTS AND SERVICES

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

5.3 Analyze the ways of locating customers

PERFORMANCE OBJECTIVE

P5.3 Given information on locating prospects for a sale, analyze the ways of locating customers. To be acceptable, six ways must be identified and one specific example of how each might be used must be given.

CRITERION-REFERENCED MEASURE

C5.3 Identification of six ways to locate customers; a specific example of how each might be used

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Relate the needs and interests of individuals to their likelihood of becoming buyers.
2. Match agricultural products and services with ways of locating prospects for each.
3. Practice methods of remembering and pronouncing names.
4. Discuss the following methods of locating prospective customers:
   a. newspapers
   b. promotional meetings
   c. observation
   d. farmer organizations
   e. records of calls at supply stores
   f. inquiries to identify outstanding farmers.

CONCEPT/DUTY AREA:

5. SELLING AGRICULTURAL PRODUCTS AND SERVICES

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

5.4 Demonstrate methods of obtaining and maintaining a customer's attention

PERFORMANCE OBJECTIVE

P5.4 Given a role-play situation or a supervised work experience setting, demonstrate methods of obtaining and maintaining a customer's attention. A minimum of 7 items must be rated acceptable on the checklist provided.

CRITERION-REFERENCED MEASURE

C5.4 Instructor's Checklist 5.4; minimum of 7 items rated acceptable

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Define methods for obtaining and maintaining a customer's attention.
2. Describe how to use each method of obtaining and maintaining a customer's attention.
3. Arrange for a local FFA Agricultural Business contest, and have students compete for "best sales demonstration."

INSTRUCTOR'S CHECKLIST 5.4

Demonstrate methods of obtaining and maintaining a customer's attention

ITEM	RATING*	
	Acceptable	Unacceptable
1. Use courtesy and common sense.		
2. Have a neat appearance.		
3. Make eye contact.		
4. Ask something.		
5. Say something.		
6. Show something.		
7. Give something.		
8. Share something.		
9. Tell success story.		
10. Offer a challenge.		
11. Give a compliment.		
12. Show personal interest.		

*A minimum of 7 items must be rated acceptable.

CONCEPT/DUTY AREA:

5. SELLING AGRICULTURAL PRODUCTS AND SERVICES

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

5.5 Assess the methods of closing a sale

PERFORMANCE OBJECTIVE

P5.5 Given the methods for closing a sale and a description of each, assess the methods of closing a sale. A score of 100% must be achieved on the quiz provided.

CRITERION-REFERENCED MEASURE

C5.5 "Closing A Sale" quiz; 100% accuracy

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Name the methods of closing a sale.
2. Define each method of closing a sale.
3. Observe the methods of closing a sale.

Task 5.5

CLOSING A SALE

QUIZ

Name _____ Course_____

Match the list of methods of closing a sale with the proper description by placing the letter of the description in the blank provided.

METHOD		DESCRIPTION
1._____	The check question	A - Asks a question that calls for a definite, immediate decision.
2._____	The closing question	B - Asks a question such as, "Is there any reason why you shouldn't...".
3._____	The assumption close	C. Asks a question that is especially phrased to require an answer that will reveal the degree or extent of the prospect's intent to buy.
4._____	The power question	D. Begins the paperwork to close the sale before a definite "yes" decision has been given by the prospect.
5._____	The choice close	E. Asks a question about the details of transaction rather than whether or not to buy.
6._____	The weighing close	F. Serves as an advisor to help the prospect make a decision.

CLOSING A SALE

Answer Key

1. C
2. A
3. D
4. B
5. E
6. F

CONCEPT/DUTY AREA:

5. SELLING AGRICULTURAL PRODUCTS AND SERVICES

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

5.6 Make a sales presentation

PERFORMANCE OBJECTIVE

P5.6 Given instruction on locating prospects, obtaining and maintaining a customer's attention, and closing a sale, make a sales presentation. All items on the checklist provided must be rated acceptable.

CRITERION-REFERENCED MEASURE

C5.6 "Sales Presentation" checklist; all items rated acceptable

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. List the components (steps) in a sales presentation.
2. Describe the purpose of each step in a sales presentation.
3. Plan a sales presentation for an agricultural product or service.

SALES PRESENTATION
Checklist

ITEM	RATING*	
Approach	Acceptable	Unacceptable
1. Made approach with confidence.		
2. Established a friendly atmosphere.		
3. Made a strong opening statement.		
4. Gained customer interest through appeal to the senses.		
5. Showed interest in the customer.		
6. Determined the customer's need.		
Presentation of product/service features and benefits		
1. Mentioned a number of features.		
2. Demonstrated the obvious features first.		
3. Demonstrated the hidden features.		
4. Stressed the benefits of the product/service.		
5. Related the product features to the customer's needs and wants.		
6. Appealed to customer's emotion and/or reason.		

* All items must receive acceptable rating.

Source: Teacher's Resource Guide for General Marketing: Level I, Personal Selling. Virginia Department of Education.

SALES PRESENTATION (continued)

ITEM	RATING*	
	Acceptable	Unacceptable
7. Let the customer participate.		
8. Solicited reactions from the customer.		
9. Dramatized the presentation.		
Overcoming Objections and Excuses 1. Built answers to common objectives into sales talk.		
2. Listened carefully to the objection.		
3. Used an appropriate method for handling the objection.		
Closing the Sale 1. Used appropriate techniques for building to a close.		
2. Made a smooth, effective close using appropriate techniques.		
3. Quickly and effectively completed the mechanics of closing.		

* All items must receive acceptable rating.

CONCEPT/DUTY AREA:

5. SELLING AGRICULTURAL PRODUCTS AND SERVICES

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

5.7 Classify customers

PERFORMANCE OBJECTIVE

P5.7 Given 10 descriptions of various customers, classify each customer as either industrial, wholesale, or retail. A minimum of 8 classifications must be made correctly.

CRITERION-REFERENCED MEASURE

C5.7 8 of 10 customer classifications correct

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Define industrial, wholesale, and retail customers.
2. Describe the type of business that would relate to each classification.
3. Identify an example of each type of customer.

CONCEPT/DUTY AREA:

5. SELLING AGRICULTURAL PRODUCTS AND SERVICES

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

5.8 Make a follow-up call or visit

PERFORMANCE OBJECTIVE

P5.8 Given a role-play situation, make a follow-up call or visit. All items on an instructor-prepared checklist must be rated as acceptable.

CRITERION-REFERENCED MEASURE

C5.8 Instructor-prepared checklist; all items rated acceptable

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Explain the importance of a follow-up call.
2. Relate the follow-up call to the satisfaction of the customer.
3. Relate the follow-up call to future sales.

RESOURCES

TASK 5.1

Equipment and Material: Instructor-provided guidelines

Audiovisuals: Salesmanship in an Agricultural Business (slidefilm). Vocational Agriculture Service.

References: Salesmanship in an Agricultural Business. Vocational Agriculture Service.
Selling and Salesmanship for Agricultural Products. Ohio Agricultural Education Curriculum Materials Service.

TASK 5.2

Equipment and Material: Instructor-prepared written test

TASK 5.3

None identified

TASK 5.4

Equipment and Material: Role-play situations
Instructor's Checklist 5.4

Audiovisuals: Advertising Your Product (slidefilm). Vocational Agriculture Service.
Displaying Merchandise (slidefilm). Vocational Agriculture Service.

References: Selling and Salesmanship for Agricultural Products. Ohio Agricultural Education Curriculum Materials Service.

TASK 5.5

Equipment and Material: "Closing a Sale" quiz

References: Selling and Salesmanship for Agricultural Products. Ohio Agricultural Education Curriculum Materials Service.

TASK 5.6

Equipment and Material: Sales Presentation checklist

Audiovisuals: Salesmanship in an Agricultural Business (slidefilm). Vocational Agriculture Service.

TASK 5.6 (continued)

References: Selling and Salesmanship for Agricultural Products. Ohio Agricultural Education Curriculum Materials Service.
Teacher's Resource Guide for General Marketing: Level I, Personal Selling. Virginia Department of Education.

TASK 5.7

Equipment and Material: Instructor-provided descriptions of customers

References: Selling and Salesmanship for Agricultural Products. Ohio Agricultural Education Curriculum Materials Service.

TASK 5.8

Equipment and Material: Instructor-prepared checklist

DUTY AREA

6. USING BUSINESS LAWS IN AGRICULTURAL BUSINESS

TASKS/COMPETENCIES

6.1 Describe state labor laws

6.2 Identify the elements of a sales contract

6.3 Identify state agricultural regulatory agencies that monitor the farm supply store

6.4 Describe the intent of common state laws that apply to agribusiness

6.5 Describe federal laws pertaining to agribusiness

6.6 Explain the legal responsibilities of the firm to employees, customers, business associates, and government

CONCEPT/DUTY AREA:

6. USING BUSINESS LAWS IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

6.1 Describe state labor laws

PERFORMANCE OBJECTIVE

P6.1 Given classroom instruction and resources, describe state labor laws. Description must be made in accordance with instructor guidelines and must include three actions required by each law.

CRITERION-REFERENCED MEASURE

C6.1 Three actions required by each state labor law; instructor-provided guidelines

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Identify state laws concerning wages and hours.
2. Define unemployment insurance, and discuss related state laws.
3. Identify state laws concerning working conditions.
4. Discuss worker's compensation.
5. Explain state laws concerning disabililty benefits.
6. Relate each state law to an agricultural business situation.
7. Describe each law's effect on the operation of an agricultural business.

CONCEPT/DUTY AREA:

6. USING BUSINESS LAWS IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

6.2 Identify the elements of a sales contract

PERFORMANCE OBJECTIVE

P6.2 Given instruction on contracts, identify the elements used in contracts by writing at least two accurate descriptive statements about each of the five terms listed in C6.2.

CRITERION-REFERENCED MEASURE

C6.2 Minimum of two accurate descriptive statements written for each of the following:

a) competent parties
b) legal subject matter
c) an offer
d) an acceptance
e) a consideration.

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Define contract.
2. Describe the purpose of a contract.
3. Identify situations where contracts have been used.
4. List and define the essential elements of a contract.
5. Invite an attorney to discuss contracts.
6. Provide an opportunity for students to prepare a legal contract for FFA sales or services.

CONCEPT/DUTY AREA:

6. USING BUSINESS LAWS IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

6.3 Identify state agricultural regulatory agencies that monitor the farm supply store

PERFORMANCE OBJECTIVE

P6.3 Given a farm supply store situation, identify the appropriate state regulatory agencies that monitor this type of business. Identification should be made in the form of a list including the title and function of each state agency.

CRITERION-REFERENCED MEASURE

C6.3 Listing of all agencies that monitor specified store situation; listing complete

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. List and describe the function of state agricultural regulatory agencies.
2. Determine where to obtain information on state regulation of agricultural businesses.
3. Describe the services of state regulatory agencies.

CONCEPT/DUTY AREA:

6. USING BUSINESS LAWS IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

6.4 Describe the intent of common state laws that apply to agribusiness

PERFORMANCE OBJECTIVE

P6.4 Given a list of common state laws that apply to agribusiness, describe the intent of each law. Description should include an explanation of how each law would affect an agricultural business. An instructor-provided worksheet must be completed with 80% accuracy.

CRITERION-REFERENCED MEASURE

C6.4 Instructor-provided worksheet; 80% accuracy

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Name the common state laws that apply to the farm supply business.
2. Relate the law to the appropriate regulatory agency.
3. Describe the intent of each law.
4. State the effects that each law has on the agricultural industry.
5. Describe the Hazardous Occupations Act.
6. Discuss the Child Labor Act.
7. Explain the Illegal Aliens Act.

CONCEPT/DUTY AREA:

6. USING BUSINESS LAWS IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

6.5 Describe federal laws pertaining to agribusiness firms

PERFORMANCE OBJECTIVE

P6.5 Given instruction on certain federal laws, describe federal laws pertaining to agribusiness firms. Description should be made in accordance with instructor-provided guidelines.

CRITERION-REFERENCED MEASURE

C6.5 Description of federal laws; instructor-provided guidelines

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Identify the Fair Labor Standards Act.
2. Discuss the Occupational Safety and Health Act.
3. Explain the Child Labor Act.
4. Discuss the intent of the Davis-Bacon Act.
5. Explain the relationship between state and federal laws.
6. Invite guest speakers from agencies such as the Department of Labor.

CONCEPT/DUTY AREA:

6. USING BUSINESS LAWS IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

6.6 Explain the legal responsibililties of the firm to employees, customers, business associates, and government

PERFORMANCE OBJECTIVE

P6.6 Given an agricultural business case situation, explain the legal responsibilities of the firm to the employees, the customers, business associates, and government. Explanation must be made in accordance with directions provided in instructor-prepared guidelines.

CRITERION-REFERENCED MEASURE

C6.6 Explanation of legal responsibilities; instructor-prepared guidelines

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Review information on various state and federal laws.
2. Identify the appropriate laws and regulations.
3. Determine the firm's degree of compliance with each law and regulation.

RESOURCES

TASK 6.1

Equipment and Material: Current copies of state labor laws

TASK 6.2

Equipment and Material: Sample contracts

References: Agricultural Law. Levi.
Cowboy Economics. Oppenheimer.

TASK 6.3

None identified

TASK 6.4

Equipment and Material: Instructor-provided worksheet and list of state laws pertaining to agribusiness

TASK 6.5

Equipment and Material: Instructor-provided guidelines
Materials (pamphlets, brochures, etc.) related to federal laws

TASK 6.6

Equipment and Material: Instructor-prepared guidelines and case study

DUTY AREA

7. IDENTIFYING MARKETING TECHNIQUES FOR AGRICULTURAL PRODUCTS AND SERVICES

TASKS/COMPETENCIES

7.1 Identify sources of market information

7.2 Establish selling prices

7.3 Explain the relationship of markup to margin

7.4 Identify economic and environmental factors that influence types of agricultural products that should be produced in an area

7.5 Determine the most economical and appropriate type of transportation for a product

7.6 Relate economics to the distribution and marketing of agricultural products (local, national, and international)

7.7 Determine how the futures market is used as a marketing tool in the agricultural industry

CONCEPT/DUTY AREA:

7. IDENTIFYING MARKETING TECHNIQUES FOR AGRICULTURAL PRODUCTS AND SERVICES

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

7.1 Identify sources of market information

PERFORMANCE OBJECTIVE

P7.1 Given a specific agricultural product or service, identify sources of market information. Identification should be made in an oral or written report presented in accordance with instructor-prepared guidelines.

CRITERION-REFERENCED MEASURE

C7.1 Oral or written report; instructor-prepared guidelines

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. List newspaper articles that include market information.
2. List radio and television broadcasts that include market information.
3. List publications that contain market information.
4. Describe how to use a computer to obtain market information.
5. Describe how to use a telephone to obtain market information.
6. Discuss the reliability of sources.
7. Determine how long market information is accurate.

CONCEPT/DUTY AREA:

7. IDENTIFYING MARKETING TECHNIQUES FOR AGRICULTURAL PRODUCTS AND SERVICES

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

7.2 Establish selling prices

PERFORMANCE OBJECTIVE

P7.2 Given a situation in which a price needs to be established and information concerning cost, competitors' prices, advertising, and projected sales, establish a selling price that is within 10% of the price limits set by the instructor.

CRITERION-REFERENCED MEASURE

C6.2 Established price within 10% of that determined by instructor

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Define the right price.
2. Relate the terms volume of sale and unit profit.
3. Identify the four choices that a marketer has in setting prices.
4. Explain the relationship between marketing pressure and setting prices.
5. Explain the relationship between competition and setting prices.

CONCEPT/DUTY AREA:

7. IDENTIFYING MARKETING TECHNIQUES FOR AGRICULTURAL PRODUCTS AND SERVICES

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

7.3 Explain the relationship of markup to margin

PERFORMANCE OBJECTIVE

P7.3 Given case situations involving costs and prices, explain the relationship of markup to margin. In each case, the price must be set and an explanation of the relationship of markup to margin provided. Eighty percent of the case situations must be completed correctly.

CRITERION-REFERENCED MEASURE

C7.3 Instructor-prepared case situations; 80% completed correctly

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Define markup and margin.
2. Describe the process of pricing.
3. Explain markup based on cost.
4. Explain markup based on selling price.
5. Draw a graph to illustrate the effect of established price on volume.

CONCEPT/DUTY AREA:

7. IDENTIFYING MARKETING TECHNIQUES FOR AGRICULTURAL PRODUCTS AND SERVICES

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

7.4 Identify economic and environmental factors that influence types of agricultural products that should be produced in an area

PERFORMANCE OBJECTIVE

P7.4 Given information on agricultural production factors, identify the economic and environmental factors that influence the type of agricultural products that should be produced in an area. Identification should be made with 90% accuracy on an instructor-provided quiz.

CRITERION-REFERENCED MEASURE

C7.4 Instructor-provided quiz; 90% accuracy

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Relate the climate to agricultural production.
2. Relate the topography to agricultural production.
3. Relate the soil to agricultural production.
4. Relate the density of population to agricultural production.
5. Explain political factors that influence agricultural production.
6. Describe industrial influences on agricultural production.
7. Relate the conservation practices of the area to agricultural production.

CONCEPT/DUTY AREA:

7. IDENTIFYING MARKETING TECHNIQUES FOR AGRICULTURAL PRODUCTS AND SERVICES

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

7.5 Determine the most economical and appropriate type of transportation for a product

PERFORMANCE OBJECTIVE

P7.5 Given a situation in which a product may be shipped by several different types of transportation and the cost for each type, determine the most economical and appropriate type of transportation. Determination should be made in the form of a written report with all items on the instructor's checklist rated acceptable.

CRITERION-REFERENCED MEASURE

C7.5 Instructor's Checklist 7.5; all items rated acceptale

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. List types of transportation for a product.
2. Determine the exact cost of each type of transportation.
3. Determine other advantages or disadvantages for each type of transportation.
4. Discuss factors such as perishability of the product.
5. Discuss report writing; describe format, style, and organization.

INSTRUCTOR'S CHECKLIST 7.5

ITEM	RATING*	
	Acceptable	Unacceptable
1. All available types of transportation are listed.		
2. Exact cost of each type of transportation is determined and calculated correctly.		
3. Advantages of each type of transportation are listed.		
4. Disadvantages of each type of transportation are listed.		
5. Selected method of transportation is appropriate based on economics and logic.		
6. Report is complete and written in correct format.		
7. Words are spelled correctly.		
8. Grammar is correct.		
9. Report is neatly written or typed.		

* All items must receive acceptable rating.

CONCEPT/DUTY AREA:

7. IDENTIFYING MARKETING TECHNIQUES FOR AGRICULTURAL PRODUCTS AND SERVICES

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

7.6 Relate economics to the distribution and marketing of agricultural products (local, national, and international)

PERFORMANCE OBJECTIVE

P7.6 Given instruction on economics, relate economics to the distribution and marketing of agricultural products in the locality, the nation, and throughout the world. A minimum of 70% must be achieved on an instructor-prepared test.

CRITERION-REFERENCED MEASURE

C7.6 Instructor-prepared test; 70% accuracy

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Define economics.
2. Relate economics to production.
3. Relate economics to distribution.
4. Relate economics to consumption.
5. Relate economics to goods and services.
6. Relate economics to supply and demand.
7. Describe a free enterprise system.

CONCEPT/DUTY AREA:

7. IDENTIFYING MARKETING TECHNIQUES FOR AGRICULTURAL PRODUCTS AND SERVICES

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

7.7 Determine how the futures market is used as a marketing tool in the agricultural industry

PERFORMANCE OBJECTIVE

P7.7 Given information on the futures market and instructor's guidelines, determine how the futures market is used as a marketing tool in the agricultural industry. All specified information must be included in a written report.

CRITERION-REFERENCED MEASURE

C7.7 Written report in correct format and containing all information specified; instructor's guidelines

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Define hedging, speculating, and short selling.
2. Describe how the futures market works.
3. Invite an agricultural broker to discuss the futures market.
4. Select a commodity and follow its progress in the market.

RESOURCES

TASK 7.1

Equipment and Material: Publications containing market information

Audiovisuals: A Market for Your Product (slidefilm). Vocational Agriculture Service.

References: Fundamentals of Marketing Agricultural Products. Vocational Agriculture Service.
Marketing Agricultural Products. Ohio Agricultural Education Curriculum Materials Service.
The Marketing of Agricultural Products. Kohls and Uhl.

TASK 7.2

Equipment and Material: Farm machinery price books and catalogs

Audiovisuals: Product Competition (slidefilm). Vocational Agriculture Service.
Product Cost Analysis/Pricing (slidefilm). Vocational Agriculture Service.

References: Marketing of Agricultural Products. Kohls and Uhl.
Principles of Merchandising: A Key to Profitable Marketing. Wilson.

TASK 7.3

Equipment and Material: Instructor-provided case situations

Audiovisuals: Product Competition (slidefilm). Vocational Agriculture Service.
Product Cost Analysis/Pricing (slidefilm). Vocational Agriculture Service.

References: Agricultural Business Procedures and Records. Ohio Agricultural Education Curriculum Materials Service.

TASK 7.4

Equipment and Material: Instructor-prepared quiz

References: Marketing Agricultural Products. Ohio Agricultural Education Curriculum Materials Service.
Marketing of Agricultural Products. Kohls and Uhl.

TASK 7.5

Equipment and Material: Instructor's Checklist 7.5

TASK 7.5 (continued)

References: Marketing Agricultural Products. Ohio Agricultural Education Curriculum Materials Service.
Marketing of Agricultural Products. Kohls and Uhl.

TASK 7.6

Equipment and Material: Instructor-prepared test

References: Marketing Agricultural Products. Ohio Agricultural Education Curriculum Materials Service.

TASK 7.7

Equipment and Material: Instructor-provided guidelines

Audiovisuals: Grain Futures (transparencies). Vocational Agriculture Service.

References: Cowboy Economics. Oppenheimer.
Marketing Agricultural Products. Ohio Agricultural Education Curriculum Materials Service.
Marketing of Agricultural Products. Kohls and Uhl.

DUTY AREA

8. USING AGRICULTURAL MECHANICS IN AGRICULTURAL BUSINESS

TASKS/COMPETENCIES

8.1 Conduct an inventory of farm machinery and equipment

8.2 Conduct an inventory of machinery and equipment repair parts, fuel, oil, and grease

8.3 Purchase fuel, oil, and grease for machinery/equipment

8.4 Purchase machinery/equipment repair parts

8.5 List the guidelines for proper fuel storage facilities

8.6 Select proper equipment to combat fire

8.7 Describe machinery and equipment insurance

8.8 Develop a machinery maintenance plan

8.9 Use balances, moisture testers, screens, and dockage machines to grade grain

8.10 Troubleshoot selected machinery

CONCEPT/DUTY AREA:

8. USING AGRICULTURAL MECHANICS IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

8.1 Conduct an inventory of farm machinery and equipment

PERFORMANCE OBJECTIVE

P8.1 Given access to a farm machinery business or a simulated situation, conduct an inventory of all farm machinery and equipment. Completed inventory form must be neat and legible.

CRITERION-REFERENCED MEASURE

C8.1 Inventory form; complete, neat, and legible

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Describe the purpose of an inventory.
2. Define inventory, model number, and serial number.
3. Identify manufacturer's name of selected farm machinery.
4. Explain uses of various machines and equipment.
5. Develop an inventory form.
6. Compare inventory software programs.

CONCEPT/DUTY AREA:

8. USING AGRICULTURAL MECHANICS IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

8.2 Conduct an inventory of machinery and equipment repair parts, fuel, oil, and grease

PERFORMANCE OBJECTIVE

P8.2 Given access to a farm machinery business, conduct an inventory of machinery and equipment repair parts, fuel, oil, and grease. The completed inventory form must be neat and legible.

CRITERION-REFERENCED MEASURE

C8.2 Inventory form; complete, neat, and legible

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Review the purpose of an inventory.
2. Locate machinery and equipment parts in manuals, catalogs, or on microfilm, and identify identification numbers.
3. Locate machinery and equipment parts and petroleum supplies in storage, and identify identification numbers.
4. Record part by name, number, manufacturer, and model.
5. Determine safe storage conditions for fuels and lubricants.
6. Define shelf-life.
7. Evaluate computer software inventory programs.

CONCEPT/DUTY AREA: 8. USING AGRICULTURAL MECHANICS IN AGRICULTURAL BUSINESS

COURSE: AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

8.3 Purchase fuel, oil, and grease for machinery/equipment

PERFORMANCE OBJECTIVE

P8.3 Given a simulated situation in which petroleum products are needed for machinery or equipment, purchase fuel, oil, and grease in the correct amounts for the situation, and complete correctly all necessary paper work. All items on the instructor-provided checklist must be rated acceptable.

CRITERION-REFERENCED MEASURE

C8.3 Instructor's Checklist 8.3; all items rated acceptable

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. List the uses of fuel, oil, and grease.
2. Describe the different specifications for fuel, oil, and grease.
3. Secure competitive prices for the petroleum products needed.
4. Decide what to purchase, where to purchase it, and how much to purchase.
5. Complete requisition forms, purchase orders, credit forms, invoices, and other necessary paper work.

INSTRUCTOR'S CHECKLIST 8.3

ITEM	RATING*	
	Acceptable	Unacceptable
The student 1. Determined previous consumption of each item.		
2. Selected the correct grade needed.		
3. Determined the amount of each grade needed.		
4. Evaluated potential sources of supply.		
5. Completed all forms necessary to complete the order.		

* All items must receive acceptable rating.

CONCEPT/DUTY AREA:

8. USING AGRICULTURAL MECHANICS IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

8.4 Purchase machinery/equipment repair parts

PERFORMANCE OBJECTIVE

P8.4 Given equipment and supply catalogs and a situation requiring a replacement part for machinery or equipment, purchase machinery or equipment repair parts. All items on an instructor-prepared checklist must be rated acceptable.

CRITERION-REFERENCED MEASURE

C8.4 Instructor-prepared checklist; all items rated acceptable

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Identify the broken part, the manufacturer's name, and the model of the machine or equipment in need of repair.
2. Use parts catalog, operation manual, microfiche reader, or computer terminal to identify appropriate replacement part.
3. Locate supplier(s) of the part; compare costs.
4. Order the replacement part.
5. Complete requisition forms, purchase orders, credit forms, invoices, and other paper work.

CONCEPT/DUTY AREA:

8. USING AGRICULTURAL MECHANICS IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

8.5 List the guidelines for proper fuel storage facilities

PERFORMANCE OBJECTIVE

P8.5 Given instruction on storage of fuels on the farm, list five of the guidelines for proper fuel storage facilities. The list must be completed with 100% accuracy.

CRITERION-REFERENCED MEASURE

C8.5 Five guidelines for proper storage of fuels; 100% accuracy

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Describe the hazards of improperly stored farm fuels.
2. Identify the components of a fire.
3. Describe ventilation of fuel storage facilities.
4. Describe the location of fuel storage facilities.
5. Conduct a safety survey in the community to identify improperly stored fuel.
6. Have the local FFA chapter participate in a safety contest.

CONCEPT/DUTY AREA:

8. USING AGRICULTURAL MECHANICS IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

8.6 Select proper equipment to combat fire

PERFORMANCE OBJECTIVE

P8.6 Given instruction on emergency fire control and descriptions of specific situations where a fire must be controlled, select the proper equipment to combat the fire. An instructor-provided worksheet must be completed with 90% accuracy.

CRITERION-REFERENCED MEASURE

C8.6 Instructor-prepared worksheet; 90% accuracy

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Identify the components of a fire.
2. Identify fire fighting equipment.
3. Describe fire prevention equipment regulations in buildings used for agricultural businesses.
4. Demonstrate the use of fire fighting equipment.
5. Review classroom and laboratory evacuation procedures.
6. State the location of fire alarms and fire extinguishers within and near the agricultural classroom.
7. Distinguish among different types of fire extinguishers.
8. Invite local firefighters to demonstrate the use of firefighting equipment.

CONCEPT/DUTY AREA:

8. USING AGRICULTURAL MECHANICS IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

8.7 Describe machinery and equipment insurance

PERFORMANCE OBJECTIVE

P8.7 Given information on machinery and equipment insurance and a case situation, describe machinery and equipment insurance by selecting the most appropriate plan for the case situation. Selection must be made in a written report that includes all specified criteria.

CRITERION-REFERENCED MEASURE

C8.7 Written report to include: (a) sources of insurance; (b) costs; (c) types of coverage needed; (d) liability features; (e) value of machinery/equipment; and (f) degree of risk.

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Define insurance.
2. State the need for machinery and equipment insurance.
3. Describe the types of machinery and equipment insurance coverage.
4. Discuss how machinery is covered under farm liability policies.
5. Explain how floater policies can cover machinery damage.
6. Distribute copies of various insurance policies; compare types of coverage.
7. Invite an insurance broker to speak to class about farm machinery insurance policies.

CONCEPT/DUTY AREA:	COURSE:
8. USING AGRICULTURAL MECHANICS IN AGRICULTURAL BUSINESS	AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

8.8 Develop a machinery maintenance plan

PERFORMANCE OBJECTIVE

P8.8 Given an operation manual for a specific machine or piece of equipment, develop a machinery maintenance plan for the selected item. The plan should be made in the form of a maintenance schedule and should include all routine maintenance recommended in the operation manual.

CRITERION-REFERENCED MEASURE

C8.8 All routine maintenance procedures included and scheduled in maintenance plan; operation manual

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Locate maintenance recommendations in operation manual.
2. Identify and list maintenance needed.
3. List by name and number all filters, lubricants, and replacement supplies needed.
4. Indicate hours of operation or calendar days between each maintenance item needed.
5. Record machinery and equipment services.
6. Develop checklist for maintenance procedures.
7. Identify any specialized tools needed for certain types of maintenance.

CONCEPT/DUTY AREA:

8. USING AGRICULTURAL MECHANICS IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

8.9 Use balances, moisture testers, screens, and dockage machines to grade grain

PERFORMANCE OBJECTIVE

P8.9 Given instruction on grading grain, use balances, moisture testers, screens, and dockage machines to grade grain. Grading should match instructor's grading on at least 70% of the samples tested.

CRITERION-REFERENCED MEASURE

C8.9 Graded grain matches instructor's grade in 70% of samples tested

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Describe the purpose of grading grain.
2. Identify and use each item of equipment used in grading grain.
3. Determine the moisture content of grain.
4. Determine the foreign material in grain.
5. Weigh grain.
6. Discusss the quality of grain.

CONCEPT/DUTY AREA:	COURSE:
8. USING AGRICULTURAL MECHANICS IN AGRICULTURAL BUSINESS	AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

8.10 Troubleshoot selected machinery

PERFORMANCE OBJECTIVE

P8.10 Given a work order, tools and equipment, and a specific piece of farm machinery, troubleshoot the selected machine according to the following procedures: a) identify the problem; b) use the proper test equipment to locate the area of trouble; c) identify the defective component (part); d) test operation; and e) return machine to operational status.

CRITERION-REFERENCED MEASURE

C8.10 Machine returned to operational status in accordance with prescribed troubleshooting procedures

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Discuss common problems often associated with various farm machines.
2. Demonstrate replacing alternator, cleaning carburetor, adjusting timing, testing battery, and replacing spark plugs.
3. Explain the use of test equipment for specific components.
4. Review service manual.

RESOURCES

TASKS 8.1-8.2

Equipment and Material:
- Farm supply and equipment catalogs
- Inventory forms
- Dealer guide book
- Inventory software (optional)
- Microcomputer (optional)

References:
- Inventory Management and Control. Vocational Agriculture Service.
- V-TECS Guide for Farm Business Manager.

TASK 8.3

Equipment and Material:
- Operation manual for machine to be served
- Service records
- Instructor's Checklist 8.3
- Requisition forms, invoices, purchase order forms

References:
- Fuels and Lubricants. AAVIM.
- V-TECS Guide for Farm Business Manager.

TASK 8.4

Equipment and Material:
- Farm equipment and supply catalogs
- Operation manual
- Parts catalogs
- Requisition forms, invoices, purchase order forms

References:
- V-TECS Guide for Farm Business Manager.

TASK 8.5

Audiovisuals:
- Fuels and Lubricants (transparencies). AAVIM.

References:
- Fuels and Lubricants. AAVIM.

TASK 8.6

Equipment and Material:
- Fire blanket
- Dry chemical fire extinguisher
- Pressurized water fire extinguisher
- Instructor-prepared worksheet

TASK 8.7

Equipment and Material:
- Agricultural insurance publications
- Sample insurance policies
- Instructor-provided case situations

Audiovisuals: Insurance in the Farm Business. Vocational Agriculture Service.

References: V-TECS Guide for Farm Business Manager.

TASK 8.8

Equipment and Material:
- Operation/service manuals
- Service records

References: V-TECS Guide for Farm Business Manager.

TASK 8.9

Equipment and Material:
- Balances
- Screens
- Grain samples
- Dockage machines
- Moisture testers

TASK 8.10

Equipment and Material:
- Service manuals
- Replacement parts

References:
- Agricultural Machinery Service Instructional Resource Guide. Virginia Department of Education.
- Farm Equipment Operator. V-TECS.
- Tractor Mechanic. V-TECS.

DUTY AREA

9. USING PLANT SCIENCE IN AGRICULTURAL BUSINESS

TASKS/COMPETENCIES

9.1 Identify seed samples

9.2 Recommend crop management practices to improve volume of grain produced

9.3 Identify types of grain damage

9.4 Determine weight loss incurred in drying grain

9.5 Plan a cropping program

9.6 Prepare inventory of harvested crops

9.7 Evaluate crop insurance

9.8 Determine the fertilizer needs for a crop

9.9 Develop plan for pesticide need

9.10 Develop plan for seed/plant needs

9.11 Interpret soil test report

9.12 List the criteria used in hybrid seed corn selection

9.13 Develop budget for changing a crop program

9.14 Develop crop marketing plan

9.15 Develop plan for purchase and operation of irrigation system

CONCEPT/DUTY AREA:

9. USING PLANT SCIENCE IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

9.1 Identify seed samples

PERFORMANCE OBJECTIVE

P9.1 Given guidelines and 20 seed samples, identify 15 seed samples according to criteria established in instructor-provided guidelines.

CRITERION-REFERENCED MEASURE

C9.1 15 of 20 seed samples identified correctly; instructor-provided guidelines

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Relate the importance of seed identification.
2. List the parts of a seed.
3. List the characteristics of a seed.
4. Distinguish among different grass seeds.
5. Distinguish among different grain seeds.
6. Prepare samples of the most commonly sold seeds, and discuss the characteristics of each.
7. Conduct a seed identification contest as an FFA activity.

CONCEPT/DUTY AREA:

9. USING PLANT SCIENCE IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

9.2 Recommend crop management practices to improve volume of grain produced

PERFORMANCE OBJECTIVE

P9.2 Given instructor's guidelines, a simulated crop program, soil information, slope and drainage information, crop marketing information, and machinery and equipment available, recommend crop management practices that will improve volume of grain produced. Recommendation must be made in a written plan and must be consistent with accepted crop management practices as described in instructor's guidelines.

CRITERION-REFERENCED MEASURE

C9.2 Crop management practices recommendation; instructor's guidelines

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Identify crop management practices.
2. Identify management practices that may be improved.
3. Relate management practices to improved production potential.
4. Apply improved management practices in an SOEP, if appropriate.

CONCEPT/DUTY AREA:

9. USING PLANT SCIENCE IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

9.3 Identify types of grain damage

PERFORMANCE OBJECTIVE

P9.3 Given six samples of grain with different types of damage, identify three types of damage.

CRITERION-REFERENCED MEASURE

C9.3 Three of six types of damaged grain samples identified correctly

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Identify different kinds of grain.
2. Secure samples of damaged grain from local seed or feed dealer, and have students match sample with type of grain damage.

CONCEPT/DUTY AREA:

9. USING PLANT SCIENCE IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

9.4 Determine weight loss incurred in drying grain

PERFORMANCE OBJECTIVE

P9.4 Given moisture content and shrinkage tables, quantity of grain, and moisture content before and after drying, determine the weight loss incurred by drying the grain. The tables must be read correctly, and all calculations must be 100% accurate.

CRITERION-REFERENCED MEASURE

C9.4 Weight loss determination correct; all calculations 100% accurate

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Read a moisture content and shrinkage table.
2. Define moisture content.
3. Calculate percentages.
4. Determine weight before and after drying.

CONCEPT/DUTY AREA:

9. USING PLANT SCIENCE IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

9.5 Plan a cropping program

PERFORMANCE OBJECTIVE

P9.5 Given production capability of available land and a list of potential crops, plan a cropping program. The plan must be written and presented in accordance with instructor-provided guidelines.

CRITERION-REFERENCED MEASURE

C9.5 Written cropping plan; instructor-provided guidelines

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Analyze soil productivity of available land.
2. Identify crops that can be grown.
3. Prepare budget for each type of crop:
   a. list of costs
   b. projected income from crops.
4. Compare crop budgets.
5. Select crop or crops to be grown.
6. Prepare a list of the amounts of seed, fertilizer, and pesticide needed.
7. Assess credit needs for selected crops.

CONCEPT/DUTY AREA:

9. USING PLANT SCIENCE IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

9.6 Prepare inventory of harvested crops

PERFORMANCE OBJECTIVE

P9.6 Given a farm cropping plan and crop yields, prepare an inventory by calculating the total volume of each crop produced. The inventory must include a list of each crop harvested. Volume calculated must be within 5% of that calculated by instructor.

CRITERION-REFERENCED MEASURE

C9.6 Calculations of each crop harvested within 5% of instructor's calculations

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Calculate the total acres of each crop harvested.
2. Determine the average yield per acre.
3. Calculate the total volume of grain harvested.
4. Compare computer software inventory packages.

CONCEPT/DUTY AREA:

9. USING PLANT SCIENCE IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

9.7 Evaluate crop insurance

PERFORMANCE OBJECTIVE

P9.7 Given a farm plan and a selected crop, evaluate crop insurance by developing a feasibility study including the value of the crop and the cost of insurance. The study must be completed in accordance with instructor-provided guidelines.

CRITERION-REFERENCED MEASURE

C9.7 Feasibility study; instructor-provided guidelines

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Determine the acreage to be insured.
2. Estimate the anticipated yield.
3. Estimate the anticipated value of crop.
4. Determine cost of insuring crop.
5. Explain how to collect on an insured crop.

CONCEPT/DUTY AREA:

9. USING PLANT SCIENCE IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

9.8 Determine the fertilizer needs for a crop

PERFORMANCE OBJECTIVE

P9.8 Given a crop and a field for planting the crop, determine the fertilizer needs for the crop. Fertilizer recommendation must be within 20% of that determined by the instructor or agricultural extension agent.

CRITERION-REFERENCED MEASURE

C9.8 Fertilizer recommendation within 20% of that determined by the instructor or agricultural extension agent

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Take soil samples.
2. Submit soil samples for analysis.
3. Interpret soil test data.
4. Compare nutritional needs of a crop with soil sample data.

CONCEPT/DUTY AREA:

9. USING PLANT SCIENCE IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

9.9 Develop plan for pesticide need

PERFORMANCE OBJECTIVE

P9.9 Given current cropping plans, crop pest information, pesticide information, and availability and cost of materials and/or contract for custom application, develop a plan for pesticide need. Instructor must confirm that the plan will provide needed control with minimum environmental damage.

CRITERION-REFERENCED MEASURE

C9.9 Pesticide plan providing needed control with minimal environmental damage; instructor's verification

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Review cropping plan for current year.
2. Identify pests that commonly cause crop damage and loss.
3. Assess need for pesticides.
4. Assess costs of pesticide application.
5. Compare self-application to contract application (costs, time, efficiency).
6. Contact suppliers for price, availability, quality, and quantity.
7. Investigate other possibilities (cultural practices, natural insect enemies, biological means) of reducing insect infestation.

CONCEPT/DUTY AREA:

9. USING PLANT SCIENCE IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

9.10 Develop plan for seed/plant needs

PERFORMANCE OBJECTIVE

P9.10 Given cropping plans, prices and availability of seeds/plants, and instructor's guidelines, develop plan for seed/plant needs. Crop selection, variety selection, and plant rate plans must agree with current conditions and seed/plant needs of the farm enterprise as verified by the instructor and plan must be written in accordance with instructor-provided guidelines.

CRITERION-REFERENCED MEASURE

C9.10 Written plans; instructor-provided guidelines

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Review cropping plans for current year.
2. Assess quantity and variety of seed/plant needs.
3. Obtain comparison yield trial results.
4. Determine price, availability, quality, and quantity of seeds and plants.
5. Identify suppliers of various plants/seeds.

CONCEPT/DUTY AREA:

9. USING PLANT SCIENCE IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

9.11 Interpret soil test report

PERFORMANCE OBJECTIVE

P9.11 Given a soil test report, interpret the report by developing fertilizer recommendations for an assigned crop. The recommendations must provide adequate nutrients to produce a crop as specified in the Agronomy Handbook.

CRITERION-REFERENCED MEASURE

C9.11 Fertilizer recommendations for assigned crop based on soil test report; Agronomy Handbook specifications

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Review cropping plan of previous and current years.
2. Obtain analysis of soil samples.
3. Analyze crop nutrient needs.
4. Analyze yield goals.
5. Assess fertilizer needs.
6. Evaluate fertilizer costs as they relate to yields.

CONCEPT/DUTY AREA:

9. USING PLANT SCIENCE IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

9.12 List the criteria used in hybrid seed corn selection

PERFORMANCE OBJECTIVE

P9.12 Given instruction on hybrid corn, list 7 of the 10 criteria used in the selection of hybrid seed corn.

CRITERION-REFERENCED MEASURE

C9.12 Seven of the following ten criteria listed: 1) maturity, 2) stalk strength, 3) stand density, 4) yield, 5) height, 6) use, 7) resistant qualities, 8) cost, 9) versatility, 10) area to be planted

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Define hybrid seed.
2. Describe how hybrids are developed.
3. Describe how seed corn is propagated.
4. Compare characteristics of various seed varieties.

CONCEPT/DUTY AREA:

9. USING PLANT SCIENCE IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

9.13 Develop budget for changing a crop program

PERFORMANCE OBJECTIVE

P9.13 Given a crop enterprise description and past crop and financial records, develop a budget for changing a crop program. The budget plan must include a) appropriate crop program; b) resources; c) anticipated expenditures; d) current prices for crops sold; and e) an evaluation plan to be implemented during the growing season. The plan must be complete and written in accordance with instructor's guidelines.

CRITERION-REFERENCED MEASURE

C9.13 Budget plan; instructor-provided guidelines

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Study crop budgeting techniques for cash crops and livestock.
2. Select appropriate crop program.
3. Compute variable costs, fixed costs, and returns.
4. Review budgeting procedures.
5. Develop an evaluation plan.

CONCEPT/DUTY AREA:

9. USING PLANT SCIENCE IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

9.14 Develop crop marketing plan

PERFORMANCE OBJECTIVE

P9.14 Given a case situation, develop a crop marketing plan for a surplus crop. The plan must be rated acceptable according to criteria specified in instructor-provided guidelines.

CRITERION-REFERENCED MEASURE

C9.14 Crop marketing plan; instructor-provided guidelines

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Assess surplus quantities of crops on the farm.
2. Identify potential for a more profitable, marketable crop.
3. Determine alternative marketing strategies:
   a. investigate cash crop opportunities
   b. investigate use of surplus for livestock feed.

CONCEPT/DUTY AREA:

9. USING PLANT SCIENCE IN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

9.15 Develop plan for purchase and operation of irrigation system

PERFORMANCE OBJECTIVE

P9.15 Given land use and cropping plan, develop a plan for the purchase and operation of an irrigation system. All items on the checklist provided must be rated acceptable.

CRITERION-REFERENCED MEASURE

C9.15 Instructor's Checklist 9.15; all items rated acceptable

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Review land use and cropping plan.
2. Assess water availability.
3. Analyze sources of water.
4. Assign small group study of various types of irrigation systems.
5. Compare feasible alternative irrigation systems.
6. Explain where to obtain necessary irrigation permits.
7. Assess additional labor requirements.
8. Assess financial implications.
9. Prepare schedule of irrigation needs for each crop.
10. Prepare schedule of irrigation maintenance service.

INSTRUCTOR'S CHECKLIST 9.15

ITEM	RATING*	
	Acceptable	Unacceptable
The plan includes: 1. an assessment of water availability.		
2. an analysis of water sources.		
3. a statement noting permits needed.		
4. an itemized listing of irrigation equipment needed.		
5. an assessment of additional labor requirements.		
6. a projection of crop value.		
7. a statement of financial implications.		
8. a schedule of irrigation needs for each crop.		
9. a schedule of irrigation maintenance service.		

* All items must receive acceptable rating.

RESOURCES

TASK 9.1

Equipment and Material: Seed samples
Instructor-provided guidelines

TASK 9.2

Equipment and Material:
Instructor-provided guidelines
Simulated crop program including soil, site, and crop marketing information, and available machinery

References:
Working in Plant Science. Bishop and others.

TASK 9.3

Equipment and Material:
Grain samples

Audiovisuals:
Corn Problems: Tasseling to Maturity (slides). Vocational Agriculture Service.
Diseases of Soybeans (slides). Vocational Agriculture Service.
Diseases of Wheat (slides). Vocational Agriculture Service.
Grain Information Program (software). Vocational Agriculture Service.

References:
Common Problems of Soybeans. Vocational Agriculture Service.
Corn Insects and Their Control. Vocational Agriculture Service.
Field Crop Diseases. Ohio Agricultural Education Curriculum Materials Service.
Insect Pests of Field Crops and Stored Grains. Ohio Agricultural Education Curriculum Materials Service.
Wheat Diseases. Vocational Agriculture Service.
Working in Plant Science. Bishop and others.

TASK 9.4

Equipment and Material:
Weight loss and shrinkage tables for grain

TASK 9.5

Equipment and Material:
Department of Agriculture crop and livestock handbook
Farm equipment and supply catalogs
Production marketing publications
Calculator
Instructor-provided guidelines

TASK 9.5 (continued)

References: Choosing Specific Crops to Grow and Estimating Production. Vocational Agriculture Service.
Planning the Cropping System. Vocational Agriculture Service.

TASK 9.6

Equipment and Material:
- Cropping plan
- Record of crop yields

References: Farming and the Computer. AAVIM.

TASK 9.7

Equipment and Material:
- Farm plan
- Instructor-provided guidelines

Audiovisuals: Insurance in the Farm Business (slidefilm). Vocational Agriculture Service.

References: Agricultural Finance. Lee.
Using Insurance in the Farm Business. Vocational Agriculture Service.

TASK 9.8

Equipment and Material:
- Soil auger
- Bucket
- Plastic bags/containers
- Shovel
- Hand trowel

Audiovisuals: Fertilizer Quantity (software). AAVIM.
"Selection and Application." Fertilizers and Soil Fertility (filmstrip/cassette). Prentice-Hall Media.
Soil Test Interpreter (software). AAVIM.
Soil Testing and Fertility (transparencies). Vocational Agriculture Service.

References: A Handbook of Agronomy. Virginia Cooperative Extension Service.
Field Crop Nutrition. Ohio Agricultural Education Curriculum Materials Service.
Hunger Signs in Crops. Vocational Agriculture Service.
Planning a Fertilizer Program. Vocational Agriculture Service.
Planning the Nitrogen Program. Vocational Agriculture Service.

TASK 9.9

Equipment and Material:
- Cropping plan
- Crop record book
- Calculator
- Publications containing information on pesticides

TASK 9.9 (continued)

Audiovisuals: Identifying Common Insect Pests (slides). Vocational Agriculture Service.
Understanding and Safe Use of Pesticides (slidefilm). Vocational Agriculture Service.

References: Applying Pesticides. AAVIM.
Crop Chemicals. AAVIM.
Conservation Farming. Hughes.

TASK 9.10

Equipment and Material:
- Cropping plans
- Crop record book
- Calculator
- Instructor-provided guidelines
- Seed/plant agricultural publications

Audiovisuals: "Plant Nutrition." Soil: The Growth Medium (filmstrip/cassette). Prentice-Hall Media.
Soil Test Interpretator (software). AAVIM.
Soil Testing and Fertility (transparencies). Vocational Agriculture Service.

TASK 9.11

Equipment and Material:
- Soil auger
- Soil test report

References: Agronomy Handbook. Virginia Cooperative Extension Service.
Collecting and Preparing Soil Samples for Testing. Vocational Agriculture Service.
Nature of Soil Acidity and Major Plant Nutrients. Vocational Agriculture Service.
pH Test for Soil Acidity. Vocational Agriculture Service.
Soil Liming--A Key to Better Farming. Vocational Agriculture Service.

TASK 9.12

Equipment and Material: Publications containing descriptions of hybrid seed corn varities

Audiovisuals: "Hybrid Seed Production and Seed Selection." Corn Production (filmstrip/cassette). Prentice-Hall Media.
Producing Hybrid Seed Corn (slidefilm). Vocational Agriculture Service.

References: Seed Production of Corn, Soybeans, and Small Grains. Ohio Agricultural Education Curriculum Materials Service.

TASK 9.13

Equipment and Material:
- Past crop and financial records
- Agricultural publications
- Crop enterprise description
- Instructor-provided guidelines
- Calculator

TASK 9.14

Equipment and Material:
- Budgeting information
- Farm product price list
- Calculator
- Agricultural publications containing crop information

References: Marketing Agricultural Products. Ohio Agricultural Education Curriculum Materials Service.

TASK 9.15

Equipment and Material:
- Calculator
- Cropping plan
- Instructor's Checklist 9.15

References: Planning for an Irrigation System. AAVIM.

DUTY AREA

10. RELATING ANIMAL CARE, NUTRITION, AND DISEASE CONTROL TO AGRICULTURAL BUSINESS

TASKS/COMPETENCIES

10.1 Identify hazards that may cause fire, injury, or poisoning

10.2 Identify symptoms of nutritive deficiencies

10.3 Balance rations for different types of livestock and poultry of various ages

10.4 Recommend the use of additives and medications in livestock rations

10.5 Formulate feeds

10.6 Plan corrective measures for common livestock diseases and parasite infestations

10.7 Recommend feeding program based on evaluations of livestock quality

10.8 Compute feed required for the gain of one pound for each livestock group

CONCEPT/DUTY AREA:

10. RELATING ANIMAL CARE, NUTRITION, AND DISEASE CONTROL TO AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

10.1 Identify hazards that may cause fire, injury, or poisoning

PERFORMANCE OBJECTIVE

P10.1 Given a description of the livestock and poultry on the farm and a list of farm hazards, identify hazards that may cause fire, injury, or poisoning. Identifications should be made with a minimum of 80% accuracy.

CRITERION-REFERENCED MEASURE

C10.1 Instructor-prepared list; 80% accuracy

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Name plants that can be harmful to livestock.
2. Describe proper storage procedures for all chemicals.
3. List common household products that are poisonous to livestock.
4. Conduct a safety survey.

CONCEPT/DUTY AREA:

10. RELATING ANIMAL CARE, NUTRITION, AND DISEASE CONTROL TO AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

10.2 Identify symptoms of nutritive deficiencies

PERFORMANCE OBJECTIVE

P10.2 Given the essential nutritive elements of livestock and poultry and a list of nutritive deficiencies, identify symptoms of nutritive deficiencies. Three symtoms of each deficiency must be identified.

CRITERION-REFERENCED MEASURE

C10.2 Nutritive deficiency listing; identification of three symptoms per deficiency

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. List and explain nutritive elements essential in livestock and poultry rations.
2. Discuss symptoms associated with each type of nutritive deficiency.
3. Invite a veterinarian to discuss nutrition and feeding rations.
4. Explain how to determine nutritive value of various feeding rations.

CONCEPT/DUTY AREA:

10. RELATING ANIMAL CARE, NUTRITION, AND DISEASE CONTROL TO AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

10.3 Balance rations for different types of livestock and poultry

PERFORMANCE OBJECTIVE

P10.3 Given instruction on balancing rations for livestock and poultry, nutritional requirements, feeds available, and growth expectations, balance rations for different types of livestock and poultry. Rations must be calculated correctly to provide the nutrients necessary for expected growth. All items on an instructor-prepared checklist must be rated acceptable.

CRITERION-REFERENCED MEASURE

C10.3 Instructor-prepared checklist; all items rated acceptable

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Determine the nutritional requirements for different types of livestock and poultry with differing growth expectations.

2. Determine the food value in feed stuffs.

3. Determine ages of greatest growth in selected livestock, and describe nutritive requirements.

CONCEPT/DUTY AREA:

10. RELATING ANIMAL CARE, NUTRITION, AND DISEASE CONTROL TO AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

10.4 Recommend the use of additives and medications in livestock rations

PERFORMANCE OBJECTIVE

P10.4 Given specific disease or nutritional considerations, recommend the use of additives and medications in livestock rations. Recommendations must be in compliance with Food and Drug Administration standards as verified by the instructor.

CRITERION-REFERENCED MEASURE

C10.4 Recommendations in compliance with Food and Drug Administration standards; instructor's verification

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Describe Food and Drug Administration standards regarding feed additives and medications.
2. Identify diseases or nutritional deficiencies that may be treated with food additives and medications.
3. Relate feed additives and medications to disease and nutritional deficiencies.
4. Arrange for a field trip to a local feed mill; have students observe additives and medication being added to feeds.

CONCEPT/DUTY AREA:

10. RELATING ANIMAL CARE, NUTRITION, AND DISEASE CONTROL TO AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

10.5 Formulate feeds

PERFORMANCE OBJECTIVE

P10.5 Given a case situation involving a livestock enterprise, farm grown grains, and the need to purchase certain feed ingredients, formulate feeds. The feed ration formulation must provide the most economical combination of grains grown on the farm and grains purchased as verified by the instructor.

CRITERION-REFERENCED MEASURE

C10.5 Feed ration formulated is most economical balance of grains grown and grains purchased; instructor's verification

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Determine cost of producing home grown grains.
2. Determine marketable value of home grown grains.
3. Determine nutrients necessary for livestock enterprise.
4. Determine kinds and amounts of feed ingredients to purchase.
5. Calculate costs of ingredients to be purchased.

CONCEPT/DUTY AREA:

10. RELATING ANIMAL CARE, NUTRITION, AND DISEASE CONTROL TO AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

10.6 Plan corrective measures for common livestock diseases and parasite infestations

PERFORMANCE OBJECTIVE

P10.6 Given an instructor-prepared worksheet and information on symptoms of various livestock diseases and parasite infestations, plan corrective measures for common livestock diseases and parasite infestations. The worksheet must be completed with 80% accuracy.

CRITERION-REFERENCED MEASURE

C10.6 Instructor-prepared worksheet; 80% accuracy

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. List common livestock diseases.
2. List common livestock parasites.
3. Describe symptoms of common livestock diseases.
4. Describe symptoms of common livestock parasite infestations.
5. Explain ways to prevent the spread of various livestock diseases.
6. State methods to control the spread of parasites.
7. Explain local and state laws concerning quarantines for certain diseases.

CONCEPT/DUTY AREA:

10. RELATING ANIMAL CARE, NUTRITION, AND DISEASE CONTROL TO AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

10.7 Recommend feeding program based on evaluation of livestock quality

PERFORMANCE OBJECTIVE

P10.7 Given access to a farm enterprise, crop records, and feed requirements, recommend feeding program based on evaluation of livestock quality. Recommendations should be made in a report in accordance with instructor-provided guidelines.

CRITERION-REFERENCED MEASURE

C10.7 Report; instructor-provided guidelines

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Calculate number of livestock units.
2. Determine livestock weight.
3. Determine degree of readiness for market.
4. Assess total feed needed.
5. Evaluate available amounts of feed: amount to be purchased and alternate sources of purchases.
6. Review livestock grading standards.
7. Determine livestock grade.
8. Relate feed requirements to stage of livestock finish.
9. Arrange for students to visit a finishing house or feedlot; have students practice determining weight, grade, and degree of livestock's readiness for market.

CONCEPT/DUTY AREA:

10. RELATING ANIMAL CARE, NUTRITION, AND DISEASE CONTROL TO AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

10.8 Compute feed required for the gain of one pound for each major livestock group

PERFORMANCE OBJECTIVE

P10.8 Given a group of steers, market hogs, and lambs, calculate the feed required for the gain of one pound for each major livestock group. Calculations must be neat, accurate, and correctly computed.

CRITERION-REFERENCED MEASURE

C10.8 Calculations of feed required for gain of one pound per livestock group; 100% accuracy

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Determine pounds of feed consumed by livestock.
2. Determine weight gain.
3. Determine length of time on feed.
4. Determine feed required for a pound of gain.

RESOURCES

TASK 10.1

Equipment and Material: Pictures, slides, or samples of poisonous plants
Instructor-prepared list of farm hazards

Audiovisuals: Preventing Transportation Losses of Livestock (slides). Vocational Agriculture Service.
Safe Use of Pesticides (transparencies). Vocational Agriculture Service.

References: Lightning and Lightning Protection on the Farm. Vocational Agriculture Service.

TASK 10.2

Audiovisuals: Animal Nutrition (transparencies). Vocational Agriculture Service.

References: Feeds and Nutrition. Ensminger and Olentine.
Livestock Nutrition and Feeding. Ohio Agricultural Education Curriculum Materials Service.

TASK 10.3

Equipment and Material: Instructor-prepared checklist

References: Feeding Dairy Cattle. Vocational Agriculture Service.
General Facts on Livestock Feeding. Vocational Agriculture Service.
Livestock Nutrition and Feeding. Ohio Agricultural Education Curriculum Materials Service.
Swine Facts and Feeding. Vocational Agriculture Service.
Working in Animal Science. Peterson and others.
Working with Animal Supplies and Services. Dillon.

TASK 10.4

Equipment and Material: Food and Drug Administration standards for feed additives

References: Working in Animal Science. Peterson and others.
Working with Animal Supplies and Services. Dillon.

TASK 10.5

Equipment and Material: Instructor-prepared case study

References: Silage as an Animal Feed. Vocational Agriculture Service.

TASK 10.6

Equipment and Material: Instructor-prepared worksheet

References:
Health Problems with the Beef Cow Herd. Vocational Agriculture Service.
Insect, Tick, and Mite Pests of Livestock and Pets. Ohio Agricultural Education Curriculum Materials Service.
Working with Animal Supplies and Services. Dillon.

TASK 10.7

Equipment and Material:
Instructor-provided guidelines
Calculator
Weight measuring tape or scales

Audiovisuals:
Livestock Programs (software). AAVIM
Meat Evaluation Classes, Part I: Beef. Meat Evaluation Classes, Part II: Pork and Lamb (slide sets). Vocational Agriculture Service.
Quality and Yield Grading of Beef Carcasses (slides). Vocational Agriculture Service.

References:
Farm Business Manager. V-TECS.
USDA Grades of Beef. Vocational Agriculture Service.
USDA Grades of Swine. Vocational Agriculture Service.
Working in Animal Science. Peterson and others.

TASK 10.8

Equipment and Material:
Calculator
Livestock scales
Platform scales

References:
Working with Animal Supplies and Service. Dillon.

DUTY AREA

11. SELLING AND APPLYING AGRICULTURAL CHEMICALS

TASKS/COMPETENCIES

11.1 Explain information found on pesticide labels

11.2 Interpret safety guidelines on package labels

11.3 Name pesticide consulting services

11.4 List the procedure for applying chemicals

11.5 Identify certification requirements

11.6 Determine chemical type and application rate

11.7 Maintain equipment

11.8 Mix chemicals and carrying agents

11.9 List first aid procedures for pesticide poisoning

11.10 Identify symptoms of pesticide damage

11.11 Prepare equipment for storage

CONCEPT/DUTY AREA:

11. SELLING AND APPLYING AGRICULTURAL CHEMICALS

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

11.1 Explain information found on pesticide labels

PERFORMANCE OBJECTIVE

P11.1 Given instruction on pesticides, explain the information that appears on a pesticide label. Explanation should be made with 80% accuracy on an instructor-prepared quiz.

CRITERION-REFERENCED MEASURE

C11.1 Instructor-prepared quiz; 80% accuracy

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Define toxicity, synthetic organic pesticide, inorganic pesticide, antidote, fumigant, systemic, and persistence.
2. Explain each category of toxicity.
3. Explain the purpose of pesticide labels.
4. Identify the governmental agency that regulates information to be provided on pesticide labels.
5. Name statements or categories that must be included on each label.

CONCEPT/DUTY AREA:

11. SELLING AND APPLYING AGRICULTURAL CHEMICALS

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

11.2 Interpret safety guidelines on package labels

PERFORMANCE OBJECTIVE

P11.2 Given a pesticide package, interpret safety guidelines on the label. All items on an instructor-prepared checklist must be rated acceptable.

CRITERION-REFERENCED MEASURE

C11.2 Instructor-prepared checklist; all items rated acceptable

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Identify protective clothing used when applying pesticides.
2. State safety precautions observed in transporting pesticides.
3. Determine the appropriate method of disposing of pesticide containers.
4. Identify symptoms of contamination.
5. Identify medical antidotes for pesticide poisoning.
6. Identify environmental conditions needed for application.

CONCEPT/DUTY AREA:

11. SELLING AND APPLYING AGRICULTURAL CHEMICALS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

11.3 Name pesticide consulting services

PERFORMANCE OBJECTIVE

P11.3 Given instruction on pesticide application, name pesticide consulting services, both private and public, that are available for analysis of or consultation on chemicals and pests. Information should be presented in accordance with instructor's guidelines.

CRITERION-REFERENCED MEASURE

C11.3 Information complete and accurate in accordance with instructor-provided guidelines

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Identify local agencies that provide an analysis of insect damage.
2. Discuss the role of educational institutions in providing consultation services.
3. Identify state and federal agencies concerned with pesticide use.

CONCEPT/DUTY AREA:

11. SELLING AND APPLYING AGRICULTURAL CHEMICALS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

11.4 List the procedure for applying chemicals

PERFORMANCE OBJECTIVE

P11.4 Given information on pesticide application, list the procedure for applying chemicals. List must be complete and include each step in the correct sequence as verified by comparison to instructor's master list.

CRITERION-REFERENCED MEASURE

C11.4 Listing complete and in proper sequence; instructor's master list

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Determine time of application.
2. Notify appropriate personnel.
3. Calculate coverage.
4. Determine compatibility of equipment and chemicals.
5. Check personal protection equipment.
6. Determine all safety measures.
7. Select nozzles.
8. Adjust pressure.

CONCEPT/DUTY AREA:

11. SELLING AND APPLYING AGRICULTURAL CHEMICALS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

11.5 Identify certification requirements

PERFORMANCE OBJECTIVE

P11.5 Given information on pesticide applicator certification, identify state pesticide certification requirements with 80% accuracy on an instructor-prepared test.

CRITERION-REFERENCED MEASURE

C11.5 Instructor-prepared test; 80% accuracy

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Explain reasons for state certification.
2. Identify sources of information on state certification procedures.
3. Discuss the state pesticide certification examination.
4. Obtain copy of Virginia Pesticide Applicator Certification--Who, What, and How, and discuss with class.

CONCEPT/DUTY AREA:

11. SELLING AND APPLYING AGRICULTURAL CHEMICALS

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

11.6 Determine chemical type and application rate

PERFORMANCE OBJECTIVE

P11.6 Given information on five types of chemical products and a case situation, determine the chemical type and application rate best suited for the situation. Chemical selected and application rate must be consistent with product label approved uses and rates as verified by the instructor.

CRITERION-REFERENCED MEASURE

C11.6 Chemical type and application rate appropriate for the situation described and consistent with product label approved uses and rates; instructor's verification

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Identify five chemical products, and relate their approved uses.
2. Describe environmental conditions that restrict chemical uses.
3. Explain economic factors that restrict chemical usage.
4. Determine the performance of products for specific uses.
5. Identify insects and pests that are economically controlled by chemicals.
6. Identify plants that are economically controlled by chemicals.

CONCEPT/DUTY AREA:

11. SELLING AND APPLYING AGRICULTURAL CHEMICALS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

11.7 Maintain equipment

PERFORMANCE OBJECTIVE

P11.7 Given a pesticide sprayer and replacement parts, maintain equipment. All items on the checklist provided must be rated acceptable.

CRITERION-REFERENCED MEASURE

C11.7 "Equipment Maintenance Checklist"; all items rated acceptable

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Inspect for loosened nuts and bolts.
2. Identify proper lubricants.
3. Clean equipment.
4. Replace or repair nozzles, hoses, cut-off valves, and booms.

EQUIPMENT MAINTENANCE CHECKLIST

DUTY: Selling and Applying Agricultural Chemicals

TASK: Maintain equipment

ITEM	RATING*	
	Acceptable	Unacceptable
The student Tightened loose nuts and bolts.		
Lubricated with proper lubricant.		
Cleaned equipment properly.		
Painted equipment as necessary.		
Replaced nozzles.		
Replaced hoses.		
Repaired hoses.		
Repaired valves.		
Replaced booms.		
Repaired booms.		

* All items must receive acceptable rating.

CONCEPT/DUTY AREA:

11. SELLING AND APPLYING AGRICULTURAL CHEMICALS

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

11.8 Mix chemicals and carrying agents

PERFORMANCE OBJECTIVE

P11.8 Given a supervised work experience placement in a commercial chemical applicator's business and the necessary equipment and supplies, mix chemicals and carrying agents. All items on the checklist provided must be rated acceptable.

CRITERION-REFERENCED MEASURE

C11.8 "Chemical Mixing Checklist"; all items rated acceptable

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Identify proper time to mix chemicals.
2. Identify proper protective clothing to wear.
3. Describe potential danger to the environment.
4. Describe how to empty and rinse containers.
5. Determine which chemicals are compatible.
6. Define adjuvants, and determine when they should be used.

CHEMICAL MIXING CHECKLIST

DUTY: Selling and Applying Agricultural Chemicals

TASK: Mix chemicals and carrying agents

ITEM	RATING*	
	Acceptable	Unacceptable
The student 1. Mixed at proper time.		
2. Used proper protective clothing.		
3. Took precautions to protect environment.		
4. Emptied and rinsed containers.		
5. Checked compatibility of chemicals mixed.		
6. Used proper adjuvants (if appropriate).		

* All items must receive acceptable rating.

CONCEPT/DUTY AREA:

11. SELLING AND APPLYING AGRICULTURAL CHEMICALS

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

11.9 List first aid procedures for pesticide poisoning

PERFORMANCE OBJECTIVE

P11.9 Given information on pesticide poisoning, list first aid procedures for each of the following conditions: poison on the skin; chemical burns of the skin; poison in the eye; and inhaled poison. Four correct procedures for each condition must be listed.

CRITERION-REFERENCED MEASURE

C11.9 Pesticide poisoning conditions; four correct first aid procedures for each condition

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Identify the four major types of injuries from pesticides.
2. Identify symptoms of pesticide poisoning.
3. Demonstrate first aid practices for inhaled poisons.
4. Invite a local rescue squad to demonstrate first aid procedures for pesticide poisoning.

CONCEPT/DUTY AREA:

11. SELLING AND APPLYING AGRICULTURAL CHEMICALS

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

11.10 Identify symptoms of pesticide damage

PERFORMANCE OBJECTIVE

P11.10 Given pictures of crops that have been treated with chemicals, identify symptoms of pesticide damage. At least three symptoms must be identified correctly.

CRITERION-REFERENCED MEASURE

C11.10 Identification of three symptoms of pesticide damage

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Identify examples of retarded growth caused by pesticide residue.
2. Identify examples of leaf drop and burns caused by pesticide applications.
3. List common errors that cause pesticide damage.

CONCEPT/DUTY AREA:

11. SELLING AND APPLYING AGRICULTURAL CHEMICALS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

11.11 Prepare equipment for storage

PERFORMANCE OBJECTIVE

P11.11 Given instruction on pesticide application, prepare pesticide application equipment for storage. All items on an instructor-prepared checklist must be rated acceptable.

CRITERION-REFERENCED MEASURE

C11.11 Instructor-prepared checklist; all items rated acceptable

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Identify equipment used for pesticide application.
2. Discuss dangers of failing to clean equipment thoroughly.
3. Describe the draining and flushing process.

RESOURCES

TASK 11.1

Equipment and Material:
Instructor-prepared quiz
Samples of pesticide labels

Audiovisuals:
Applying Pesticides (slides). AAVIM.
Safe Use of Pesticides (transparencies). Vocational Agriculture Service.
Safety Series: Chemicals (software). AAVIM.
Understanding and Safe Use of Pesticides (slides). Vocational Agriculture Service.

References:
Applying Pesticides. AAVIM.
Handling and Using Pesticides Safely. Vocational Agriculture Service.
Pests, Pesticides, and You. Virginia Cooperative Extension Service.
Virginia Pesticide Applicator Certification--Who, What and How. Virginia Cooperative Extension Service.

TASK 11.2

Equipment and Material:
Instructor-prepared checklist
Samples of pesticide labels
Samples of personal safety equipment and clothing

Audiovisuals:
Applying Pesticides (slides). AAVIM.
Safe Use of Pesticides (transparencies). Vocational Agriculture Service.
Safety Series: Chemicals (software). AAVIM.
Understanding and Safe Use of Pesticides (slides). Vocational Agriculture Service.

References:
Applying Pesticides. AAVIM.
Handling and Using Pesticides Safely. Vocational Agriculture Service.
Pests, Pesticides, and You. Virginia Cooperative Extension Service.
Virginia Pesticide Applicator Certification--Who, What and How. Virginia Cooperative Extension Service.

TASK 11.3

Equipment and Material:
Newspapers
Extension Service publications
Telephone book

TASK 11.4

Audiovisuals:
Applying Pesticides (slides). AAVIM.
Sprayer Calibration (software). AAVIM.

TASK 11.4 (continued)

References:
- Applying Pesticides, 3rd ed. AAVIM.
- Core Manual--Private Applicator Training Manual. Virginia Cooperative Extension Service.
- Handling and Using Pesticides Safely. Vocational Agriculture Service.
- Private and Commercial Applicator Obligations. Virginia Cooperative Extension Service.
- Problems for Pesticide Calibration. Vocational Agriculture Service.
- Standards for Certification of Pesticide Applicators. Virginia Cooperative Extension Service.

TASK 11.5

Equipment and Materials:
- Virginia Pesticide Applicator Certification--Who, What and How. Virginia Cooperative Extension Service.

References:
- Applying Pesticides, 3rd ed. AAVIM.
- Core Manual--Private Applicator Training Manual. Virginia Cooperative Extension Service.
- Handling and Using Pesticides Safely. Vocational Agriculture Service.
- Private and Commercial Applicator Obligations. Virginia Cooperative Extension Service.
- Problems for Pesticide Calibration. Vocational Agriculture Service.
- Standards for Certification of Pesticide Applicators. Virginia Cooperative Extension Service.

TASK 11.6

Equipment and Material:
- Case situation

Audiovisuals:
- Applying Pesticides (slides/cassettes). AAVIM.
- Calibrating and Applying Pesticides Safely (slidefilm). Vocational Agriculture Service.
- Safe Use of Pesticides (transparencies). Vocational Agriculture Service.
- Selecting and Handling Pesticides (slidefilm). Vocational Agriculture Service.

References:
- Applying Pesticides. AAVIM.

TASK 11.7

Equipment and Material:
- Chemical sprayer
- Repair parts
- Lubricants
- Cleaning equipment and supplies
- "Equipment Maintenance Checklist"

References:
- Applying Pesticides. AAVIM.

TASK 11.8

Equipment and Material: "Chemical Mixing Checklist"
Chemical sprayer
Measuring equipment
Protective clothing
Water hose

References: Applying Pesticides. AAVIM.

TASK 11.9

References: Applying Pesticides. AAVIM.

TASK 11.10

Equipment and Materials: Pictures of crops damaged by pesticide

Audiovisuals: Recognizing Corn Herbicide Injury (slides). Vocational Agricultural Service.
Recognizing Soybean Herbicide Injury (slides). Vocational Agricultural Service.

TASK 11.11

Equipment and Materials: Instructor-prepared checklist
Pesticide sprayer
Flushing equipment

References: Applying Pesticides. AAVIM.

DUTY AREA

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

TASKS/COMPETENCIES

12.1 Record personal and family goals

12.2 Establish farm financial goals

12.3 Develop plan for type and size of farm enterprise

12.4 Plan a livestock program

12.5 Develop a plan for raising young stock

12.6 Investigate livestock improvement programs

12.7 Complete farm rent/lease agreement

12.8 Determine insurance needs

12.9 Develop livestock/livestock products marketing plan

12.10 Evaluate livestock insurance

12.11 Calculate depreciation

12.12 Calculate net worth of farm business

12.13 Calculate labor income

12.14 Calculate management income

12.15 Determine farm receipts and operating expenses

12.16 Complete a farm profit and loss statement

12.17 Reconcile bank statement and check register

12.18 Analyze veterinary service contracts

12.19 Evaluate machinery and equipment repair service contracts

12.20 Identify labor management procedures

DUTY AREA

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS (continued)

TASKS/COMPETENCIES

12.21 Develop an expansion plan

12.22 Calculate capital gains and losses

12.23 Complete investment credit schedule

12.24 Complete FICA schedule

12.25 Complete federal income tax form

12.26 Complete state income tax form

12.27 Establish pay scale and benefits for workers

12.28 Train workers

12.29 Prepare farm payroll records

12.30 Develop a credit plan for the farm business

CONCEPT/DUTY AREA:

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

12.1 Record personal and family goals

PERFORMANCE OBJECTIVE

P12.1 Given present family resources, family choices, and available alternatives, record personal and family goals. Goals must be recorded on an instructor-provided worksheet with all information requested supplied completely and accurately.

CRITERION-REFERENCED MEASURE

C12.1 Instructor-prepared worksheet; information recorded completely and accurately

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Appraise and analyze physical and human resources and capabilities.
2. Identify individual, family, and business goals.
3. Discuss realistic and unrealistic goals, and list examples of each.
4. Assess available alternatives.

CONCEPT/DUTY AREA:

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

12.2 Establish farm financial goals

PERFORMANCE OBJECTIVE

P12.2 Given the present factors of production (land, labor, capital, and management) and established family goals, establish farm financial goals that are compatible with individual and family resources. Goals must be submitted in a written report that includes all specified components.

CRITERION-REFERENCED MEASURE

C12.2 Written report; information presented on each of the following: a) determination of cash income needs; b) assessment of production capabilities; c) projection of income; and d) statement of tax strategies

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Review individual and family goals.
2. Determine cash income needs:
   a. family living
   b. family retirement program
   c. operating expenses
   d. debt requirement
   e. capital purchases.
3. Assess available factors of production.
4. Calculate cash and accrual income sources.
5. Analyze actual financial performance of similar situations, personal past performance, and planned performance.
6. Review disposal tax strategies of capital assets.
7. Organize information to include in a report.
8. Discuss format and other requirements for a written report.

CONCEPT/DUTY AREA:

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

12.3 Develop plan for type and size of farm enterprise

PERFORMANCE OBJECTIVE

P12.3 Given goals, abilities, and resources, develop a plan for the type and size of farm enterprise. Completed plans must meet the criteria described in C12.3 as confirmed by instructor.

CRITERION-REFERENCED MEASURE

C12.3 Written plan; evidence that type and size of farm enterprise supports family living and provides a repayment ability to maintain enterprise

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Review personal and family goals.
2. Evaluate personal interests, experience, and management abilities.
3. Identify enterprises compatible with goals and abilities.
4. Inventory present resources: land, market availability, labor, capital, and management.
5. Determine size and mix of resources.
6. Select enterprise best suited to present resources.

CONCEPT/DUTY AREA:

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

12.4 Plan a livestock program

PERFORMANCE OBJECTIVE

P12.4 Given crop acreage and yield ability and an inventory of facilities, labor, and equipment, plan a livestock program. Plan must be written in accordance with instructor-prepared guidelines.

CRITERION-REFERENCED MEASURE

C12.4 Livestock program plan; instructor-prepared guidelines

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Determine zoning laws.
2. Evaluate plan based on prevailing climate.
3. Determine amount of feed available.
4. Assess available facilities.
5. Assess available equipment.
6. Evaluate local labor market.
7. Invite a regional farm management agent to demonstrate computerized farm management services.
8. Arrange for students to use microprocessors to process data on inventory, feed, labor costs, etc.
9. Identify records that must be maintained; select a recording method.
10. Investigate livestock management systems.

CONCEPT/DUTY AREA:

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

12.5 Develop a plan for raising young stock

PERFORMANCE OBJECTIVE

P12.5 Given costs and possible returns, develop plan for raising young stock. The plan must meet the criteria stated as verified by the instructor.

CRITERION-REFERENCED MEASURE

C12.5 Written plan containing information on all of the following: a) facilities available; b) labor needed; c) breeding or purchase plans; d) costs; e) equipment needed; and f) management procedures

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Assess need for young stock.
2. Determine housing, feeding, and equipment needs.
3. Assess personnel available for care.
4. Develop variable and fixed costs.
5. Assess possible returns.
6. Compare the cost of raising young stock with that of purchasing equal quality animals.
7. Describe the benefits of raising stock with known genetic values.
8. List disease and parasite control measures.
9. Identify records that must be maintained.

CONCEPT/DUTY AREA:

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

12.6 Investigate livestock improvement programs

PERFORMANCE OBJECTIVE

P12.6 Given information on livestock improvement services available, investigate livestock improvement programs. Results of the investigation must be presented in an oral or written report in accordance with instructor's guidelines.

CRITERION-REFERENCED MEASURE

C12.6 Oral or written report; instructor's guidelines

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Determine availability of livestock improvement programs.
2. Select improvement program appropriate to needs.
3. Budget for livestock improvement program.
4. Invite a farmer enrolled in a beef cattle improvement program or dairy herd improvement program to discuss its benefits.

CONCEPT/DUTY AREA:

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

12.7 Complete farm rent/lease agreement

PERFORMANCE OBJECTIVE

P12.7 Given a case situation that describes rental/leasing needs, complete a farm rental/lease agreement that meets the lessee's needs. Completed lease must be rated acceptable according to standards on an instructor-provided checklist.

CRITERION-REFERENCED MEASURE

C12.7 Instructor-provided checklist; all items rated acceptable

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Review/evaluate alternative methods of rental/lease.
2. Determine appropriate method of rental/lease.
3. Secure appropriate lease form.
4. Discuss terminology often found in rental agreements.
5. Adapt necessary parts of lease form to meet need of the farm enterprise:
   a. option to purchase
   b. improvement credit.
6. Invite an attorney to discuss possible changes in leases.

CONCEPT/DUTY AREA:

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS FUNDAMENTALS (III) 8022

TASK/COMPETENCY:

12.8 Determine insurance needs

PERFORMANCE OBJECTIVE

P12.8 Given farm value, risk, limits of protection needs, and available rates and coverage, determine insurance needs. All items on an instructor-prepared checklist must be rated acceptable.

CRITERION-REFERENCED MEASURE

C12.8 Instructor-prepared checklist; all items rated acceptable

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Define insurance terms.
2. Measure size of each building.
3. Appraise value of each building:
   a. replacement value
   b. use value
   c. resale value
   d. depreciated value.
4. List possible events for which a farmer could be held liable.
5. Evaluate limits of liability needs.
6. Compare available insurance.
7. Verify description of property.
8. Secure building and liability insurance policies from local insurance brokers, and review in class.
9. Photograph buildings, and establish file for insurance purposes.
10. Invite an insurance broker to discuss farm insurance.

CONCEPT/DUTY AREA:

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

12.9 Develop livestock/livestock products marketing plan

PERFORMANCE OBJECTIVE

P12.9 Given livestock/livestock products component of farm enterprise, develop livestock/livestock products marketing plan. Plan must include: a) number of livestock to be marketed; b) identification of markets available for each product; c) statement of most profitable market; and d) estimate of costs.

CRITERION-REFERENCED MEASURE

C12.9 Marketing plan; all components included

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Assess marketing strategies.
2. Identify strategies appropriate to farm enterprise:
   a. cash marketing
   b. futures marketing
   c. selling breeding stock.
3. Determine number of livestock to be marketed.
4. Analyze livestock products to be marketed.
5. Identify available markets.
6. Identify most profitable market, and assess capital gains tax advantages.
7. Assess livestock/livestock products transportation needs.
8. Identify records that must be maintained.

CONCEPT/DUTY AREA:

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

12.10 Evaluate livestock insurance

PERFORMANCE OBJECTIVE

P12.10 Given livestock records and information about livestock insurance, evaluate livestock insurance. All components on an instructor-provided worksheet must be completed.

CRITERION-REFERENCED MEASURE

C12.10 Instructor-provided worksheet; all components completed

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Assess livestock insurance needs.
2. Explain the concepts of risk and uncertainty.
3. Determine the fair market value of livestock.
4. Identify various insurance programs available.
5. Determine true cost of insurance program.
6. Budget for insurance needs.
7. Identify appropriate insurance.
8. List events that could cause livestock loss.

CONCEPT/DUTY AREA:

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

12.11 Calculate depreciation

PERFORMANCE OBJECTIVE

P12.11 Given farm records, calculate depreciation. All calculations must be completed with 100% accuracy, and the depreciation method chosen must be verified by the instructor as the most advantageous to the farm enterprise for the current year.

CRITERION-REFERENCED MEASURE

C12.11 Depreciation calculations 100% accurate and depreciation method chosen the most advantageous; instructor's verification

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Determine depreciation records needed for farm business.
2. List depreciation methods available.
3. Compare advantages and disadvantages of each method.
4. Develop depreciation records for farm livestock, equipment, and facilities; discuss the best method to use for each.

CONCEPT/DUTY AREA:

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

12.12 Calculate net worth of farm business

PERFORMANCE OBJECTIVE

P12.12 Given instruction on net worth, calculate net worth of farm business. All calculations must be completed with 100% accuracy, and must show net worth gain from productivity on a cost basis and net worth at market value as verified by the instructor.

CRITERION-REFERENCED MEASURE

C12.12 Calculations of net worth correct and accurate; instructor's verification

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Assess assets:

   a. list all property
   b. assign fair market value on all property.

2. Determine liabilities:

   a. list all obligations
   b. record amount of each obligation.

3. Obtain net worth forms used by local bankers; distribute to students and discuss.

CONCEPT/DUTY AREA:

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

12.13 Calculate labor income

PERFORMANCE OBJECTIVE

P12.13 Given information, resources, and an instructor-provided worksheet, calculate labor income. Worksheet must be completed with 90% accuracy.

CRITERION-REFERENCED MEASURE

C12.13 Instructor-provided worksheet; 90% accuracy

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Assign a rate of return on farm investment.
2. Assign a management payment.
3. Review records needed to calculate labor income.
4. Maintain labor income records.
5. Investigate computer software available for calculating and recordkeeping purposes.

CONCEPT/DUTY AREA:

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

12.14 Calculate management income

PERFORMANCE OBJECTIVE

P12.14 Given financial records and an instructor-provided worksheet, calculate management income. Worksheet must be completed with 90% accuracy.

CRITERION-REFERENCED MEASURE

C12.14 Instructor-provided worksheet; 90% accuracy

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Assign a rate of return on farm investment.
2. Assign a labor income.
3. Review records needed to calculate management income.
4. Investigate professional management services.

CONCEPT/DUTY AREA:

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

12.15 Determine farm receipts and operating expenses

PERFORMANCE OBJECTIVE

P12.15 Given a case situation including information on income received and expenditures made, determine farm receipts and operating expenses on a monthly basis by completing an instructor-prepared worksheet with 90% accuracy.

CRITERION-REFERENCED MEASURE

C12.15 Instructor-prepared worksheet; 90% accuracy

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Describe types of recordkeeping systems.
2. Identify information needed for selected method.
3. List all expenses.
4. Discuss prorate.
5. Calculate monthly/yearly farm receipts.
6. Discuss software programs available for accounting purposes.
7. Determine operating margin for a specific unit of operation.
8. Calculate personal expenses and farm expenses.
9. Subtract cash expense for the year from cash income to determine net cash operating income.

CONCEPT/DUTY AREA:

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

12.16 Complete a farm profit and loss statement

PERFORMANCE OBJECTIVE

P12.16 Given farm financial information and records, complete a farm profit and loss statement. The statement must include all profits and all losses and be completed with 100% accuracy.

CRITERION-REFERENCED MEASURE

C12.16 Completion of profit and loss statement; 100% accuracy

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Review procedures for calculating cash income and expenditures.
2. Review procedures for calculating inventories and depreciation schedules.
3. Determine value of unpaid family labor and farm produce used at home.
4. Discuss each component of a profit and loss form.
5. Investigate financial recordkeeping services.

CONCEPT/DUTY AREA:

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

12.17 Reconcile bank statement and check register

PERFORMANCE OBJECTIVE

P12.17 Given a sample bank statement and check register, reconcile the statement and register. Register balance and statement balance must be reconciled with 100% accuracy.

CRITERION-REFERENCED MEASURE

C12.17 Reconciliation of bank statement and register; 100% accuracy

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Identify components of a bank statement.
2. Arrange deposit slips in chronological order.
3. Check statement for recording of deposits.
4. Arrange checks in numerical order.
5. Check statement for recording of checks.
6. Record service charges.
7. List outstanding checks.

CONCEPT/DUTY AREA:

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

12.18 Analyze veterinary service contracts

PERFORMANCE OBJECTIVE

P12.18 Given information on veterinary services available in the community, analyze veterinary service contracts. All items on an instructor-prepared checklist must be rated acceptable.

CRITERION-REFERENCED MEASURE

C12.18 Instructor-prepared checklist; all items rated acceptable

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Discuss the concept of contracted veterinary services.
2. Assess the need for veterinary services.
3. Determine the availability of contracted veterinary services in the area.
4. Provide samples of veterinary contracts, and discuss the costs of various services.

CONCEPT/DUTY AREA:

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS OPERATIONS (IV) 8024

TASK/COMPETENCY:

12.19 Evaluate machinery and equipment repair service contracts

PERFORMANCE OBJECTIVE

P12.19 Given information on repair services available in the community, evaluate machinery and equipment repair service contracts. All items on an instructor-prepared checklist must be rated acceptable.

CRITERION-REFERENCED MEASURE

C12.19 Instructor-prepared checklist; all items rated acceptable

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. List equipment and machinery that would be covered by a contract.
2. Calculate repair costs for the previous year.
3. Identify companies in the area that provide repair services.
4. Review warranties on specified machinery.
5. Determine costs of replacement parts.

CONCEPT/DUTY AREA:

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

12.20 Identify labor management procedures

PERFORMANCE OBJECTIVE

P12.20 Given information and resources, identify labor management procedures with 80% accuracy on an instructor-prepared written test.

CRITERION-REFERENCED MEASURE

C12.20 Instructor-prepared written test; 80% accuracy

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Describe the components of a labor force plan: include the assessment of labor needs and the use of full-time and part-time employees.
2. Discuss hiring and firing procedures.
3. Identify methods of assessing worker performance.
4. Assess the degree of competency required for a particular job.
5. Assign research on federal labor laws and regulations.
6. Discuss pay scales, wage incentives, and fringe benefits.
7. Explain training procedures.

CONCEPT/DUTY AREA:

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

12.21 Develop an expansion plan

PERFORMANCE OBJECTIVE

P12.21 Given farm goals and projected growth, develop a plan for expansion of existing facilities or building new farm buildings. The plan must be rated acceptable according to criteria specified on an instructor-prepared worksheet.

CRITERION-REFERENCED MEASURE

C12.21 Instructor-prepared worksheet; all items rated acceptable

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Assess the needs for expansion.
2. Inventory existing facilities.
3. Determine capacity, adaptability, and alternate use.
4. Assess cost of repairing, remodeling, and expanding existing facilities.
5. Compare cost of replacement with cost of new facilities.
6. Develop budget information.
7. Determine profitability and repayment factors of facilities.
8. Select most profitable alternative.
9. Plan for cash flow ability to service money demands for purchase and operations:
   a. evaluate investment credit advantages
   b. evaluate implications of disposal.
10. Investigate possibilities of leasing buildings.

CONCEPT/DUTY AREA:

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

12.22 Calculate capital gains and losses

PERFORMANCE OBJECTIVE

P12.22 Given a case situation, calculate capital gains and losses. All items on an instructor-prepared worksheet must be completed correctly.

CRITERION-REFERENCED MEASURE

C12.22 Instructor-prepared worksheet; all items completed correctly

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Evaluate nature of the sale.
2. Identify IRS code sections.
3. Determine items that do and do not qualify as a capital gain or loss.
4. Obtain IRS bulletins and forms, and distribute to students.

CONCEPT/DUTY AREA:

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

12.23 Complete investment credit schedule

PERFORMANCE OBJECTIVE

P12.23 Given a case study and the necessary forms, complete investment credit schedule. Completed schedule must match instructor's schedule.

CRITERION-REFERENCED MEASURE

C12.23 Investment credit schedule; instructor's master schedule

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Define qualified investment, investment credit, and realistic life span.
2. Identify items that qualify for investment credit.
3. Demonstrate how to calculate investment credit.
4. Identify records of sales of items subject to investment credit.
5. Invite a tax consultant to discuss the provision for investment credit.

CONCEPT/DUTY AREA:

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

12.24 Complete FICA schedule

PERFORMANCE OBJECTIVE

P12.24 Given a case situation involving farm income eligible for FICA, complete a federal income tax FICA schedule. The completed schedule must match the instructor's master schedule.

CRITERION-REFERENCED MEASURE

C12.24 FICA schedule; instructor's master schedule

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Identify farm income eligible for FICA taxes.
2. Calculate FICA taxes due.
3. List information needed to complete FICA schedule.

CONCEPT/DUTY AREA:

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

12.25 Complete federal income tax form

PERFORMANCE OBJECTIVE

P12.25 Given records, figures, and the necessary forms, complete federal income tax form. The tax form must be complete and accurate, and all computations must be correct as verified by a comparison to instructor's master form.

CRITERION-REFERENCED MEASURE

C12.25 Completion of federal income tax form; instructor's master form

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Complete the following:
   a. farm income or loss schedule
   b. capital gains or loss schedule
   c. investment credit schedule
   d. FICA schedule.
2. Transfer bottom line figures from various schedules to Form 1040.
3. Enter "other" income in appropriate boxes.
4. Calculate total income and deductions.
5. Calculate taxable income.
6. Compute tax due or refund amount due.
7. Devise transparencies of each section of the form, and "walk through" the steps; have students complete a sample form during this procedure.
8. Discuss tax consultant services.

CONCEPT/DUTY AREA:

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

12.26 Complete state income tax form

PERFORMANCE OBJECTIVE

P12.26 Given completed federal tax forms and appropriate W-2 forms, complete state income tax form. Completed form must include all state income tax elements of the farm enterprise and calculations must be without error as verified by the instructor.

CRITERION-REFERENCED MEASURE

C12.26 Completion of state income tax form; instructor's verification

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Transfer amounts listed on federal tax forms to appropriate places on state tax forms.
2. Calculate total income.
3. Calculate total expense.
4. Calculate tax due or refund amount due.
5. Enter information in appropriate boxes on tax forms.
6. Attach check or request refund.
7. Attach W-2 forms to state income tax form.

CONCEPT/DUTY AREA:

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

12.27 Establish pay scale and benefits for workers

PERFORMANCE OBJECTIVE

P12.27 Given a case situation including employee wage, hour, and tax information, establish pay scale and benefits for workers. An instructor-prepared worksheet must be completed with 90% accuracy.

CRITERION-REFERENCED MEASURE

C12.27 Instructor-prepared worksheet; 90% accuracy

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Assess worker's background and experience.
2. Determine wage incentives.
3. Determine base pay.
4. Describe the dollar value of fringe benefits.
5. Determine tax advantages of fringe benefits.
6. List the components of a pay scale.

CONCEPT/DUTY AREA:

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

12.28 Train workers

PERFORMANCE OBJECTIVE

P12.28 Given a role-play situation, train a worker. All items on an instructor-prepared checklist must be rated acceptable.

CRITERION-REFERENCED MEASURE

C12.28 Instructor-prepared checklist; all items rated acceptable

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Discuss the demonstration performance method of training.
2. Assess worker's background and experience.
3. Select task for which skill is lacking.
4. Demonstrate the task.
5. Have worker demonstrate the same task.
6. Evaluate worker's performance.
7. Identify minimum competence.
8. Incorporate peer teaching when appropriate.

CONCEPT/DUTY AREA:

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

12.29 Prepare farm payroll records

PERFORMANCE OBJECTIVE

P12.29 Given gross wages, withholding items, net wages, and payroll rules and regulations, prepare farm payroll records. Completed records must be in agreement with instructor's master record.

CRITERION-REFERENCED MEASURE

C12.29 Payroll records; instructor's master record

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Record gross wages.
2. Record items withheld by employer.
3. Record items paid by employer.
4. Record net wages.
5. Record deposits made to state and federal agencies.
6. Record and prepare detailed statements for employer, employee, and government agencies.

CONCEPT/DUTY AREA:

12. OPERATING THE FARM AS AN AGRICULTURAL BUSINESS

COURSE:

AGRICULTURAL BUSINESS MANAGEMENT (V) 8026

TASK/COMPETENCY:

12.30 Develop a credit plan for the farm business

PERFORMANCE OBJECTIVE

P12.30 Given instruction on farm credit and an instructor-provided checklist, develop a credit plan for the farm business. Plan must be rated acceptable according to criteria stated on instructor's checklist.

CRITERION-REFERENCED MEASURE

C12.30 Credit plan; instructor-prepared checklist

ENABLING OBJECTIVES/LEARNING ACTIVITIES

1. Determine need for credit plan for farm business.
2. Complete financial statements:
   a. net worth statement
   b. profit/loss
   c. cash flow statement
   d. comparative standard analysis sheet.
3. Identify items for which credit will be needed.
4. Assess sources of lending services.
5. Select a lending service.

RESOURCES

TASK 12.1

Equipment and Material: Instructor-provided worksheet

References: Financial Planning in Agriculture. Schneeberger and Osburn.

TASK 12.2

Equipment and Material: Calculators

References: Farm Business Manager. V-TECS.
Modern Agriculture Management. Schneeberger and Osburn.

TASK 12.3

Equipment and Material: Calculators

References: Farm Management Guide. Doane.
Income Possibilities for Your Farm. Vocational Agriculture Service.
Modern Agriculture Management. Schneeberger and Osburn.
Planning a Profitable Farm Business. Vocational Agriculture Service.
Planning for Repayment of Loans. Vocational Agriculture Service.

TASK 12.4

Equipment and Materials: Calculators
Instructor-prepared guidelines
Microprocessors (optional)

Audiovisuals: Livestock Management Games: Cattle, Dairy, Sheep, and Swine (software). AAVIM.

References: Farm Business Manager. V-TECS.
Farm Management Guide. Doane.
Farming and the Computer. AAVIM.
Approved Practices in Beef Cattle Production. Juergenson.
Approved Practices in Swine Production. Baker and Juergenson.
Planning Livestock for the Farm. Vocational Agriculture Service.

TASK 12.5

Equipment and Materials: Calculators
Microprocessors (optional)

Audiovisuals: Livestock Management Games: Cattle, Dairy, Sheep, and Swine (software). AAVIM.

References: Farm Business Manager. V-TECS.
Farm Management Guide. Doane.

TASK 12.6

Equipment and Materials: Instructor-provided guidelines

References: Farm Business Manager. V-TECS.
Working with Animal Supplies and Services. Dillon.

TASK 12.7

Equipment and Materials: Instructor-prepared checklist

References: Agricultural Finance. Lee.
Farm Management Guide. Doane.

TASK 12.8

Equipment and Materials:
Calculators
Camera
Measuring tape
Instructor-prepared checklist
Record books
Agricultural insurance bulletins, periodicals, etc.

Audiovisuals: Insurance in the Farm Business (slides/cassettes). Vocational Agriculture Service.

References: Agricultural Business Money Management. Ohio Agricultural Education Curriculum Materials Service.
Agricultural Finance. Lee
Building an Insurance Program. Ohio Agricultural Education Curriculum Materials Service.
Farm Management Guide. Doane.
Modern Agriculture Management. Schneeberger and Osburn.

TASK 12.9

Equipment and Materials: Calculator

References: Farm Business Manager. V-TECS.
Farm Management Guide. Doane.
Marketing of Agricultural Products. Kohls and Uhl.
Working in Animal Science. Peterson and Others.

TASK 12.10

Equipment and Materials: Calculator
Livestock records
Livestock insurance brochures, pamphlets, etc.

References: Farm Business Manager. V-TECS.

TASK 12.11

Equipment and Materials: Calculator
Farm records
IRS publications

Audiovisuals: Types of and Calculating Depreciation (software). AAVIM.

References: Agricultural Finance. Lee.
Cowboy Litigation. Keast and Oppenheimer.
Farm Management Guide. Doane.
Modern Agriculture Management. Schneeberger and Osburn.

TASK 12.12

Equipment and Material: Calculators
Farm financial records, inventories, etc.

References: Agricultural Finance. Lee.
Farm Business Management. Doane.

TASK 12.13

Equipment and Material: Instructor-provided worksheet
Agriculture labor publications

TASK 12.14

Equipment and Material: Instructor-provided worksheet
Agricultural labor publications

References: Agricultural Finance. Lee.

TASK 12.15

Equipment and Material: Calculator
Instructor-prepared case situation and worksheet

References: Agricultural Business Money Management. Ohio Agricultural Education Curriculum Materials Service.
Agricultural Finance. Lee.
Farm Business Manager. V-TECS.
Farm Management Guide. Doane.

TASK 12.16

Equipment and Material:
- Instructor-provided profit/loss statement form
- Calculator

References:
- Agricultural Business Money Management. Ohio Agricultural Education Curriculum Materials Service.
- Agricultural Fiance. Lee.
- Farm Business Manager. V-TECS.
- Farm Management Guide. Doane.

TASK 12.17

Equipment and Material:
- Calculator
- Bank statements
- Cancelled checks
- Checkbook
- Check register
- Deposit slips

References:
- Using Savings and Checking Accounts. Ohio Agricultural Education Curriculum Materials Service.

TASK 12.18

Equipment and Material:
- Sample veterinary contracts
- Instructor-prepared checklist

References:
- Farm Business Manager. V-TECS.

TASK 12.19

Equipment and Material:
- Instructor-prepared checklist

References:
- Farm Business Manager. V-TECS.

TASK 12.20

Equipment and Material:
- Internal Revenue Service tax publications
- Instructor-prepared written test

References:
- Agricultural Finance. Lee.
- Balancing the Labor Supply and the Farm Business. Vocational Agriculture Service.

TASK 12.21

Equipment and Material:
- Budget forms
- Calculator
- Instructor-provided worksheet

TASK 12.21 (continued)

References:
Farm Business Manager. V-TECS.
Farm Management Guide. Doane.
Planning Machinery Protection. AAVIM.
Shop Planning. AAVIM.
Utility Buildings. AAVIM.

TASK 12.22

Equipment and Material:
Calculator
IRS publications concerning capital gains and losses

References:
Farm Management Guide. Doane.

TASK 12.23

Equipment and Material:
Case study
IRS bulletins and forms

References:
Cowboy Litigation. Keast and Oppenheimer.
Farm Management Guide. Doane.
Modern Agricultural Management. Schneeberger and Osburn.

TASK 12.24

Equipment and Material:
Case study
IRS FICA scheduling forms, bulletins, and tax guides

References:
Cowboy Litigation. Keast and Oppenheimer.
Farm Management Guide. Doane.

TASK 12.25

Equipment and Material:
Federal income tax forms, bulletins, schedules, and tax guides
Case study
Calculator

References:
Agricultural Finance. Lee.
Cowboy Litigation. Keast and Oppenheimer.
Farm Business Manager. V-TECS.
Modern Agriculture Management. Schneeberger and Osburn.

TASK 12.26

Equipment and Material:
Federal income tax forms and schedules
State tax forms
Calculator

TASK 12.26 (continued)

References:
Agricultural Finance. Lee.
Farm Business Manager. V-TECS.
Cowboy Litigation. Keast and Oppenheimer.
Modern Agriculture Management. Schneeberger and Osburn.

TASK 12.27

Equipment and Material:
Instructor-prepared worksheet
Newspaper classified ads (help wanted)
Farm management service publications

TASK 12.28

Equipment and Material:
Instructor-prepared checklist

TASK 12.29

Equipment and Material:
Payroll information
Calculator
Federal and state publications containing information on income tax deductions, withholding, etc.

References:
Agricultural Finance. Lee
Farm Business Manager. V-TECS.
Cowboy Litigation. Keast and Oppenheimer.
Modern Agriculture Management. Schneeberger and Osburn.

TASK 12.30

Equipment and Material:
Calculator
Instructor-provided checklist

References:
Agricultural Finance. Lee.
Determining Credit Needs on the Farm. Vocational Agriculture Service.
Factors Involved in The Borrowing Process. Vocational Agriculture Service.
Modern Agriculture Management. Schneeberger and Osburn.
Planning for Repayment of Loans. Vocational Agriculture Service.
Sources of Farm Credit. Vocational Agriculture Service.

SECTION 2

PROGRAMS AND COURSES

The programs and courses described in this guide are based on the task analyses presented in the preceding section. All programs and courses have been approved by the Virginia Department of Education or the Virginia Community College System. The first part of this section contains a course outline for secondary courses, with tasks sequenced in suggested teaching order. Wherever possible, tasks should be modified to meet actual SOEP and cooperative work experiences.

The postsecondary (Virginia Community College System) courses shown in the second part of this section are representative of those specialized courses in The Agricultural and Natural Resources Technology degree program. Because each college in the Virginia Community College System (VCCS) has considerable latitude in the selection of courses taught in any one-year or two-year program, courses will vary from institution to institution. The courses listed here are found in the 1988 edition of the Virginia Community College System State Curriculum Guide.

SECONDARY PROGRAM DESCRIPTION

PROGRAM TITLE: Agricultural Business

DESCRIPTION: The Agricultural Business program is a course of study designed to provide the basic education necessary for entry-level employment and advancement in the broad field of agricultural business. Most secondary agricultural business programs are cooperative education programs. Students are involved in classroom activities for one period and are released to work in an agricultural business for one to three periods each day. Classroom topics include human relations development, types of agricultural businesses, leadership training, agricultural business management, record keeping, accounting, agricultural law, and other appropriate topics. A training plan is developed for the student's cooperative work experience and approved by the employer, parent, student, and instructor. This plan lists the competencies (skills) that the student will be practicing. An evaluation instrument is used by the student, employer, and instructor to monitor the student's progress toward completing the training plan. Skills developed in the secondary agricultural business programs in Virginia vary greatly and depend upon the student's interests and upon community resources. Students work for agricultural businesses in all areas of the agricultural industry.

CIP CODE: 01.0101

SUGGESTED GRADE LEVEL: 10, 11, and 12

APPROVED COURSES	VA COURSE CODE	DOT CODE	DOT TITLE
Agricultural Business Fundamentals (III)	8022	180.167-018	General farm manager
Agricultural Business Operations (IV)	8024	272.357-014	Sales representative, farm and garden equipment and supplies
Agricultural Business Management (V)	8026	272.357-022	Salesperson, horticultural and nursery
		279.357-062	Salesperson, parts
		290.447-014	Sales clerk
		408.684-014	Sprayer, hand (agricultural)
		520.685-098	Feed mixer
		550.665-018	Fertilizer mixer
		550.685-070	Insecticide mixer

AGRICULTURAL BUSINESS FUNDAMENTALS (III)

COURSE DESCRIPTION: Agricultural Business Fundamentals (III) is a one-year occupational preparation course offered at the tenth- or eleventh-grade level. The course is designed to assist students in developing the necessary knowledge, skills, habits, and attitudes for employment in off-farm agricultural businesses. These businesses provide supplies and services to farmers and process and market agricultural products. Where training centers are available, cooperative arrangements are made with local agricultural businesses to provide occupational experience for students. When training centers are not available, simulated experiences may be provided. The student acquires an understanding of agricultural businesses opportunities and learns the importance of an off-farm agricultural business. Instruction in product knowledge relating to items such as feed, seed, fertilizer, machinery, and agricultural chemicals is provided. Leadership training is given through the FFA.

PREREQUISITE: Agricultural Mechanics and Basic Animal Science

SUGGESTED GRADE LEVEL: 10 or 11

TASK/COMPETENCY SEQUENCE

1.1 Follow departmental policies
1.2 Perform safety procedures
1.3 Maintain a clean and orderly work area
1.4 Identify benefits and responsibilities of FFA membership
2.1 Identify occupations applicable to the agricultural business industry
2.2 Select a tentative occupation
2.3 Write a letter of application
2.4 Complete a job application form
2.5 Develop a resume or personal data sheet
2.6 Exhibit job interviewing skills
2.7 Write a follow-up letter of appreciation
2.8 Identify responsibilities and benefits of cooperative education
3.1 Use effective speaking and listening techniques
3.2 Explain the importance of etiquette
3.3 Explain ways to promote effective human relations with coworkers
4.1 Develop an organizational chart
4.2 Identify the traits of a successful businessperson
4.3 Describe employer obligations to employees
4.4 Identify employee incentives and fringe benefits
5.1 Identify personality traits that are beneficial to a salesperson

TASK/COMPETENCY SEQUENCE

5.2 Identify types of customer service
11.1 Explain information found on pesticide labels
11.2 Interpret safety guidelines on package labels
8.1 Conduct an inventory of farm machinery and equipment
8.2 Conduct an inventory of machinery and equipment repair parts, fuel, oil, and grease
8.3 Purchase fuel, oil, and grease for machinery/equipment
8.4 Purchase machinery/equipment repair parts
8.5 List the guidelines for fuel storage facilities
12.1 Record personal and family goals
12.2 Establish farm financial goals
12.3 Develop plan for type and size of farm enterprise
12.4 Plan a livestock program
12.5 Develop a plan for raising young stock
12.6 Investigate livestock improvement programs
12.8 Determine insurance needs

AGRICULTURAL BUSINESS FUNDAMENTALS (III)

CONTENT OUTLINE	TASK NUMBER
I. Orientation	
A. Department policies	1.1
B. Safety procedures	1.2
C. Cleaning and storage procedures	1.3
D. FFA membership	1.4
II. Agricultural Business Careers	
A. Occupation identification	2.1, 2.2
B. Letter of application	2.3
C. Application form	2.4
D. Resume/personal data sheet	2.5
E. Job interview	2.6
F. Letter of appreciation	2.7
G. Cooperative education	2.8
III. Human Relations Skills	
A. Speaking and listening techniques	3.1
B. Etiquette	3.2
C. Promotion of skills	3.3
IV. Business Procedures	
A. Organizational chart	4.1
B. Traits of successful business people	4.2
C. Employer obligations	4.3
D. Employee fringe benefits/incentives	4.4
V. Sales of Products and Services	
A. Traits of successful salespeople	5.1
B. Customer services	5.2
VI. Sales of Agricultural Chemicals	
A. Pesticide label information	11.1
B. Safety guidelines	11.2

CONTENT OUTLINE	TASK NUMBER
VII. Agricultural Mechanics	
A. Machinery/parts inventory	8.1, 8.2
B. Machinery/supplies purchases	8.3, 8.4
C. Fuel storage	8.5
VIII. Farm Business Procedures	
A. Goals	12.1, 12.2
B. Farm enterprise plan	12.3
C. Livestock plans	12.4-12.6
D. Insurance needs	12.7

AGRICULTURAL BUSINESS OPERATIONS (IV)

COURSE DESCRIPTION: Agricultural Business Operations (IV) is a one-year occupational course offered at the eleventh- or twelfth-grade level. Wherever possible, students participate in cooperative on-the-job training programs with local agricultural businesses. The curriculum emphasizes off-farm agricultural occupations, business procedures, merchandising, marketing, and agricultural business management. Instruction is provided in agricultural product knowledge, agricultural mechanics, plant science, and leadership development.

PREREQUISITE: Agricultural Business Fundamentals (III)

SUGGESTED GRADE LEVEL: 11 or 12

TASK/COMPETENCY SEQUENCE

1.1 Follow departmental policies (review)
1.2 Perform safety procedures (review)
1.3 Maintain a clean and orderly work area (review)
1.4 Identify benefits and responsibilities of FFA membership (review)
4.5 Identify methods of extending credit
4.6 Maintain a filing system
4.7 Maintain an inventory
4.8 Prepare a budget
4.9 Schedule activities
4.10 Identify concepts associated with advertising and promotion
5.3 Analyze the ways of locating customers
5.4 Demonstrate methods of obtaining and maintaining a customer's attention
5.5 Assess the methods of closing a sale
5.6 Make sales presentation
5.8 Classify customers
11.3 Name pesticide consulting services
11.4 List the procedure for applying chemicals
11.5 Identify certification requirements
11.7 Maintain equipment
11.11 Prepare equipment for storage
7.1 Locate sources of market information
7.2 Establish selling prices
7.3 Explain the relationship of markup to margin
8.6 Select proper equipment to combat fire
8.7 Describe machinery and equipment insurance
8.8 Develop machinery maintenance plan
9.1 Identify seed samples

TASK/COMPETENCY SEQUENCE

9.2 Recommend crop management practices to improve volume of grain produced
9.3 Identify types of grain damage
9.4 Determine weight loss incurred in drying grain
9.5 Plan a cropping program
9.6 Prepare inventory of harvested crops
9.7 Evaluate crop insurance
9.8 Determine the fertilizer needs for a crop
9.9 Develop plan for pesticide need
9.10 Develop plan for seed/plant needs
9.11 Interpret soil test report
10.1 Identify hazards that may cause fire, injury, or poisoning
10.2 Identify symptoms of nutritive deficiencies
10.6 Plan corrective measures for common livestock diseases and parasite infestations
12.7 Complete farm rent/lease agreement
12.9 Develop livestock/livestock products marketing plan
12.10 Evaluate livestock insurance
12.11 Calculate depreciation
12.12 Calculate net worth of farm business
12.13 Calculate labor income
12.14 Calculate management income
12.15 Determine farm receipts and operating expenses
12.16 Complete a farm profit and loss statement
12.17 Reconcile bank statement and check register
12.18 Analyze veterinary service contracts
12.19 Evaluate machinery and equipment repair service contracts

AGRICULTURAL BUSINESS OPERATIONS (IV)

CONTENT OUTLINE	TASK NUMBER
I. Orientation	
A. Department policies	1.1
B. Safety procedures	1.2
C. Cleaning and storage procedures	1.3
D. FFA membership	1.4
II. Business Procedures	
A. Credit systems	4.5
B. Filing systems	4.6
C. Inventory systems	4.7
D. Budgeting procedures	4.8
E. Scheduling procedures	4.9
F. Advertising/promotion concepts	4.10
III. Sales of Products and Services	
A. Techniques for locating customers	5.3
B. Selling techniques	5.4-5.6
C. Customer classifications	5.7
D. Follow-up calls	5.8
IV. Sales of Agricultural Chemicals	
A. Pesticide consulting services	11.3
B. Chemical application	11.4
C. Applicator certification requirements	11.5
D. Equipment maintenance	11.7
E. Equipment storage	11.11
V. Marketing Techniques	
A. Sources of market information	7.1
B. Establishment of selling prices	7.2
C. Markup and margin	7.3
VI. Agricultural Mechanics	
A. Firefighting equipment	8.6
B. Machinery/equipment insurance	8.7
C. Maintenance plans	8.8

CONTENT OUTLINE	TASK NUMBER
VII. Plant Science	
A. Seed sample identification	9.1
B. Grain growth, damage, and storage	9.2-9.4
C. Cropping program	9.5
D. Crop inventory	9.6
E. Crop insurance	9.7
F. Crop fertilizer needs	9.8
G. Crop pesticide needs	9.9
H. Seed/plant needs	9.10
I. Soil test interpretation	9.11
VIII. Livestock Care	
A. Hazards to livestock	10.1
B. Nutritive deficiencies	10.2
C. Livestock diseases and parasites	10.6
IX. Farm Business Procedures	
A. Rental agreements	12.7
B. Livestock/livestock products marketing plan	12.9
C. Livestock insurance	12.10
D. Depreciation	12.11
E. Net worth	12.12
F. Labor income	12.13
G. Management income	12.14
H. Income and expense determinations	12.15
I. Profit/loss statement	12.16
J. Check register reconcilation	12.17
K. Veterinary services contracts	12.18
L. Machinery/equipment repair service contracts	12.19

AGRICULTURAL BUSINESS MANAGEMENT (V)

COURSE DESCRIPTION: Agricultural Business Management (V) is a one-year occupational preparation course offered on a single-period basis at the twelfth-grade level. The course should be operated on a cooperative on-the-job training basis with local agricultural businesses. Much of the instruction may be individualized. The course provides further opportunities for the development of business procedures, management techniques, and agricultural product knowledge. Leadership skills continue to be developed.

PREREQUISITE: Agricultural Business Operations (IV)

SUGGESTED GRADE LEVEL: 12

TASK/COMPETENCY SEQUENCE

1.1 Follow departmental policies (review)
1.2 Perform safety procedures (review)
1.3 Maintain a clean and orderly work area (review)
1.4 Identify benefits and responsibilities of FFA membership (review)
4.11 Maintain a business checking account
4.12 Prepare customer account statements
4.13 Write letters to customers
4.14 Compile business tax information
11.6 Determine chemical type and application rate
11.8 Mix chemicals and carrying agents
11.9 List first aid procedures for pesticide poisoning
11.10 Identify symptoms of pesticide damage
6.1 Describe state labor laws
6.2 Identify the elements of a sales contract
6.3 Identify state agricultural regulatory agencies that monitor the farm supply store
6.4 Describe the intent of common state laws that apply to agribusiness
6.5 Describe federal laws pertaining to agribusiness
6.6 Explain the legal responsibilities of the firm to employees, customers, business associates, and government
7.4 Identify economic and environmental factors that influence types of agricultural products that should be produced in an area
7.5 Determine the most economical and appropriate type of transportation for a product
7.6 Relate economics to the distribution and marketing of agricultural products (local, national, and international)
7.7 Determine how the futures market is used as a marketing tool in the agricultural industry
8.9 Use balances, moisture testers, screens, and dockage machines to grade grain
8.10 Troubleshoot selected machinery
9.12 List the criteria used in hybrid seed corn selection
9.13 Develop budget for changing a crop program
9.14 Develop crop marketing plan

TASK/COMPETENCY SEQUENCE

9.15 Develop plan for purchase and operation of irrigation system
10.3 Balance rations for different types of livestock and poultry
10.4 Recommend the use of additives and medications in livestock rations
10.5 Formulate feeds
10.7 Recommend feeding program based on evaluation of livestock quality
10.8 Compute feed required for the gain of one pound for each major livestock group
12.20 Identify labor management procedures
12.21 Develop an expansion plan
12.22 Calculate capital gains and losses
12.23 Complete investment credit schedule
12.24 Complete FICA schedule
12.25 Complete federal income tax form
12.26 Complete state income tax form
12.27 Establish pay scale and benefits for workers
12.28 Train workers
12.29 Prepare farm payroll records
12.30 Develop a credit plan for the farm business

AGRICULTURAL BUSINESS MANAGEMENT (V)

CONTENT OUTLINE	TASK NUMBER
I. Orientation	
A. Department policies	1.1
B. Safety procedures	1.2
C. Cleaning and storage procedure	1.3
D. FFA membership	1.4
II. Business Procedures	
A. Bank accounts	4.11
B. Customer account statement	4.12
C. Customer correspondence	4.13
D. Business taxes	4.14
III. Sales of Agricultural Chemicals	
A. Chemical types	11.6
B. Chemicals and carrying agents	11.8
C. First aid	11.9
D. Pesticide damage to crops	11.10
IV. Agricultural Business Laws	
A. Labor laws	6.1
B. Sales contracts	6.2
C. Regulatory agencies	6.3
D. State laws	6.4
E. Federal laws	6.5
F. Legal responsibilities	6.6
V. Marketing Techniques	
A. Influences on production	7.4
B. Transportation of products	7.5
C. Relationship of economics and marketing	7.6
D. Futures market	7.7
VI. Agricultural Mechanics	
A. Grain grading equipment	8.9
B. Troubleshooting procedures	8.10

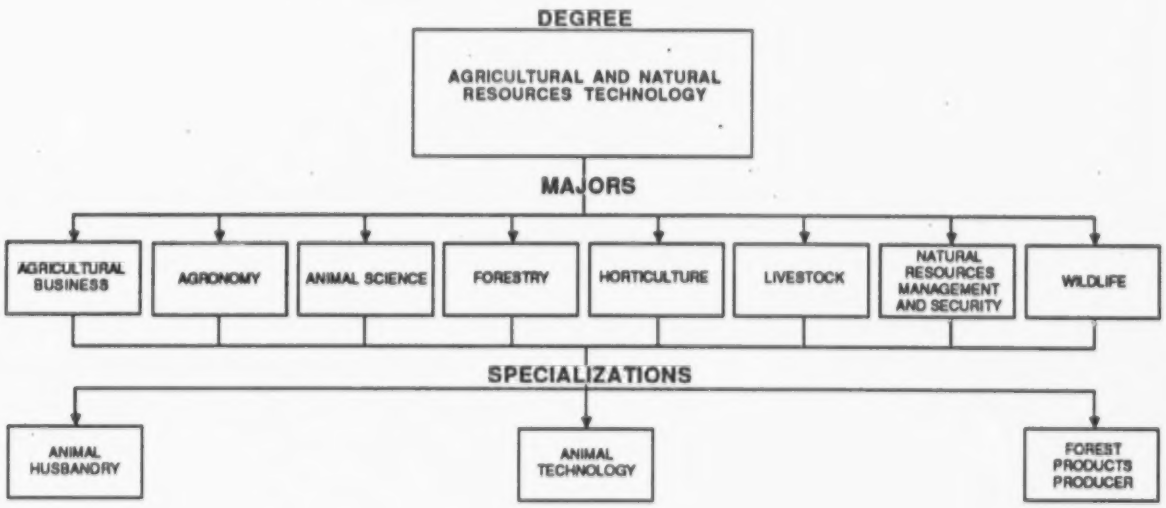
CONTENT OUTLINE	TASK NUMBER
VII. Plant Science	
A. Hybrid seed corn	9.12
B. Budgeting crop changes	9.13
C. Crop marketing plan	9.14
D. Irrigation system plan	9.15
VIII. Livestock Care	
A. Balancing of rations	10.3
B. Additives and medications	10.4
C. Feed formulation	10.5
D. Feeding program	10.7
E. Feed computations	10.8
IX. Farm Business Procedures	
A. Labor management	12.20
B. Expansion plan	12.21
C. Capital gains/losses	12.22
D. Investment credit schedule	12.23
E. FICA schedule	12.24
F. Federal income tax form	12.25
G. State income tax form	12.26
H. Worker pay scale and benefits	12.27
I. Worker training	12.28
J. Payroll records	12.29
K. Credit plan	12.30

POSTSECONDARY PROGRAMS AND COURSES

PROGRAM TITLE: Agricultural and Natural Resources Technology

DESCRIPTION: This program is one of six in the Virginia Community College System that leads to an Associate in Applied Science Degree, a degree covering all programs in Occupational-Technical Education.

Each degree program includes several majors, some of which are divided further into appropriate specifications. This breakdown is shown for the Agricultural and Natural Resources Technology degree program.



Listed below are specialized courses related to agriculture that are offered within the community college system.

AGR 100	Forage and Pasture Crop Management
AGR 105	Soil Science and Fertilizer
AGR 111-112	Care and Maintenance of Small Domestic Animals I-II
AGR 113-114	Instructor Training for Dog Obedience I-II
AGR 115-116	Behavior Problems in Dogs I-II
AGR 117	Grooming Small Animals
AGR 121-122	Management of Small Animals--Related Business I-II
AGR 130	Elements of Dairy Science
AGR 131	Elements of Dairy Science
AGR 135	Sheep Production
AGR 136	Horse Production
AGR 137	Horse Genetics, Business Management, and Marketing
AGR 138	Swine Production
AGR 139	Beef Cattle Production
AGR 145	Legal Aspects of Animal Control
AGR 205	Soil Fertility and Management
AGR 206	Peanut and Soybean Production
AGR 207	Grain Crop Production
AGR 208	Insect Control
AGR 215	Animal Nutrition
AGR 216	Animal Breeding
AGR 217	Beef Cattle Breeding Herd Management
AGR 218	Poultry Management
AGR 219	Advanced Horse Management
AGR 225	Farm Structures and Machinery
AGR 235	Companion Animal Behavior
BUS 166	Farm Business Management
CHM 135	Horticultural Chemistry
ECO 208	Agricultural Finance and Credit

POSTSECONDARY TASKS

Below is a list of tasks from the Agricultural Business Instructional Resource Guide. These tasks have been identified as appropriate for postsecondary study; consequently, they have not been included in the task analyses in Section 1.

Formulate daily objectives for organization and distribution of personnel, equipment, facilities, and goods

Evaluate employee's performance

List real estate tax regulations

Interpret a financial statement

Establish retail prices

Prepare a complete income and expense budget for a farm supply business

Analyze a business, and rate the financial soundness

Record credits and debits using a system of double-entry bookkeeping

Borrow money

Use newspaper advertising

Prepare radio advertising

Prepare direct mail advertising

Arrange for television advertising

Arrange for magazine advertising

Arrange for billboard advertising

Prepare an advertising calendar

List business promotion activities

Identify manufacturer's and wholesaler's promotional program

Plan and construct basic displays

Prepare a publicity news release

Develop an advertising budget

Plan and present a sales promotion meeting

Analyze the performance of a salesperson

Demonstrate the ability to develop a sales training program

Develop an expense accounting form

Demonstrate the ability to apply sales forecasting methods and establish sales quotas

Demonstrate the ability to establish sales territories

Demonstrate the ability to analyze sales volume

Develop a program to stimulate the performance of salespersons

Operate and read devices for detecting heating of grain in storage (hot spots)

Plan a mechanical feeding system

Develop a plan for the machinery program of a farm or business

APPENDICES

APPENDIX A References

APPENDIX B Tool and Equipment List

APPENDIX C Audiovisual Suppliers

APPENDIX A

REFERENCES

REFERENCES

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Shop Planning, 1975.
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Agricultural Business Money Management.
Agricultural Business Procedures and Records.
Building an Insurance Program.
Field Crop Diseases.
Field Crop Nutrition.
Getting Along With Other Workers.
Getting Hired For Your First Job.
Insect Pests of Field Crops and Stored Grains.
Insect, Tick, and Mite Pests of Livestock and Pets.
Keeping Your Records Straight.
Livestock Nutrition and Feeding.
Marketing Agricultural Products.
Office Procedures Used in the Agricultural Services.
Opportunities in Agricultural Occupations.
Seed Production of Corn, Soybeans, and Small Grains.
Selling and Salesmanship for Agricultural Products.
Using Savings and Checking Accounts.

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Applying for a Job.
Balancing the Labor Supply and the Farm Business.
Choosing Specific Crops to Grow and Estimating Production.
Collecting and Preparing Soil Samples for Testing.
Common Problems of Soybeans.
Common Ways of Organizing a Business.
Corn Insects and Their Control.
Customer Credit Management in Agricultural Business.
Determining Credit Needs on the Farm.
Feeding Dairy Cattle.
Fundamentals of Marketing Agricultural Products.
General Facts of Livestock Feeding.
Handling and Using Pesticides Safely.
Health Problems with the Beef Cow Herd.
Hunger Signs in Crops.
Income Possibilities for Your Farm.
Inventory Management and Control.
Lightning and Lightning Protection on the Farm.
Nature of Soil Acidity and Major Plant Nutrients.
pH Test for Soil Acidity.
Planning a Fertilizer Program.
Planning a Profitable Farm Business.
Planning for Repayment of Loans.
Planning Livestock for the Farm.
Planning the Cropping System.
Planning the Nitrogen Program.
Problems for Pesticides Calibration.
Salesmanship in an Agricultural Business.
Silage as an Animal Feed.
Soil Liming--A Key to Better Farming.
Sources of Farm Credit.
Swine Facts and Feeding.
USDA Grades of Beef.
USDA Grades of Swine.
Using Insurance in the Farm Business.
Wheat Diseases.

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APPENDIX B

TOOL AND EQUIPMENT LIST

Air compressor
Anvil
Battery charger
Battery charger accessories
Battery service kits
Battery starter tester
Battery testers
Benches, metal work
Bookcase
Branding sets
Buckets
Bushing inserter and remover
Cabinets, storage
Calculator
Caliper sets
Camera
Cash register
Cement mixer
Chisels (cold, wood)
Clamps (various)
Cleaner (steam or high pressure)
Drawing set
Drills and drill bits
Drill presses with accessories
Dust collection system
Dust particle removing system
Electric clippers
Electric groomer
Engine repair stand
Engines, small gasoline
Engraver, electric
Engraving tool
Files (various)
Fire extinguishers
Fume removal system
Furnace, heat treating
Grass shears
Grinders, portable and pedestal
Ground fault interrupter
Hand tool sets
Hollow punches set
Hose (garden, rubber)
Hydraulic jack
Jointer
Ladders, various
Lathe, wood with tools and plates
Lettering equipment for signs
Lubrication equipment
Map and chart file
Masonry tools
Microcomputer
Micrometers
Microscopes
Mitre box
Mowers
Paint brushes
Parts washer
Pipe threaders (set)
Pliers (various)
Planes (bench, block, jack)
Press, arbor
Press, hydraulic
Riveting tools
Safety tools
Sander, portable
Saws (band, compass, crosscut, hack, keyhole)
Screwdrivers (various)
Shear, lever
Shear, metal cutting
Soldering iron
Sprayers
Spreaders, lime
Tamper
Tap and die set
Tattoo set
Testers, circuit
Time clock
Tire tools
Torches, carbon arc
Torque wrenches, set
Tractor
Tractor maintenance hand tools
Vises (drill press, machinist's, pipe, woodworking
Welder (arc, oxygen-acetylene)
Welding accessories
Wheelbarrows
Wrenches, (various)

APPENDIX C

AUDIOVISUAL SUPPLIERS

American Association for Vocational Instructional Materials (AAVIM)
120 Driftmier Engineering Center
Athens, Georgia 30602

Doane Agricultural Service, Inc.
8900 Manchester Road
St. Louis, Missouri 63144

Future Farmers of America
National FFA Supply Service
5632 Mt. Vernon Memorial Highway
Alexandria, Virginia 22309

HOBAR Publications
1234 Teller Road
St. Paul, Minnesota 55112

Ohio Agricultural Education Curriculum Materials Service
2120 Fyffe Road
The Ohio State University
Columbus, Ohio 43210-1099

Singer Career Systems
80 Commerce Drive
Rochester, New York 14623

Virginia Cooperative Extension Service
Virginia Polytechnic Institute and State University
Blacksburg, Virginia 24061

Vocational Agriculture Service
College of Agriculture
University of Illinois
1401 South Maryland Drive
Urbana, Illinois 61801

Vocational Education Productions
California Polytechnic State University
San Luis Obispo, California 93407

Vocational Media Associates
Prentice-Hall Media
Box 1050
Mount Kisco, New York 10549-9989